Westfield State College

BULLETIN

1989 - 1990

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1989 - 1990 BULLETIN

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ADMISSIONS

FRESHMAN ADMISSION

The Office of Admission introduces bacculaureate degree programs to students who wish to matriculate in the day division and pursue at least 12 credits of coursework per semester. A student applying to the Office of Admission for entrance as a freshman directly from high school or with fewer than 12 college credits completed must supply the following information:

1. The Application Form
2. The Activity Sheet
3. College Board Scholastic Aptitude Test (SAT)
4. An official high school transcript, including grades from the first marking period of the senior year, or acceptable evidence of equivalent preparation.
5. Official transcripts of any college work attempted.

The College has a selective admission policy. Freshman applicants are subject to an Eligibility Index based on class rank and SAT scores established by the Board of Regents to determine minimum eligibility requirements. In accordance with the guidelines established by the Board of Regents and with the approval of the College Board of Trustees, Westfield State College has reserved the right to set higher minimum standards than those published by the Regents for the State Colleges. In addition, freshman applicants must complete the following 16 college preparatory units required by the Board of Regents:

4 units/years of English
3 units/year of Math (Algebra I & II; Geometry)
2 units/years of Social Sciences (including 1 unit of U.S. History)
2 units/years of Laboratory Sciences
2 units/years of the same Foreign Language
3 units/years of electives (taken from the above list and/or the performing arts and Computer Science)

Applicants must achieve a "C" average in these 16 units. Specific majors may require additional specific units for admission. Some majors may also require a performance test as part of the admission process.

Exemptions from the Eligibility Index and the 16 units may be granted for applicants who qualify under specific guidelines determined by the Board of Regents. Contact the Director of Admission for further information.

Applicants who meet the minimum eligibility requirements are not guaranteed admission to the College. Admission decisions are made on an individual basis by the Admission Staff beginning January 1 for the fall semester after all required credentials have been received.

The mean SAT combined score for the freshman class which enrolled in the fall of 1988 was 940. The mean rank in class for these students was the 65 percentile.

TRANSFER ADMISSION

A student will be considered as a transfer applicant if he/she will hold 12 or more semester hours (18 or more quarter hours) of college credit by the planned entrance date. In addition to filing the Application Form, transfer applicants must submit official transcripts from all colleges previously attended directly to Westfield State College. Transfer applicants will be evaluated on the basis of their total previous college academic record.

A student transferring from a two-year institution is entitled to transfer for credit toward the bachelor's degree no more than the two years (or 67 credits) of credit which constitute the requirement of the associate degree program taken as a unit.

A student who has completed the general education requirements of one state college prior to transferring to another state college is not obligated to meet additional or different general education requirements of the receiving college, with the exception of students transferring to the Maritime Academy and to or from the College of Art.

A student must successfully complete a minimum of one year as a full-time student (30 credits) and all remaining requirements for the major field of study to receive a baccalaureate degree from Westfield. In addition, some majors require the completion of a minimum number of credits at Westfield State College.

Transfer admission decisions are made beginning April 1 for the fall semester and December 1 for the spring semester after all required credentials have been received. The number of transferees accepted will be determined by existing vacancies in each degree program and the number of applicants deemed eligible according to cumulative grade point average.

Once admitted to Westfield State College, the transfer student assumes a new cumulative average that is subject to academic policies established by the College.

COMMONWEALTH TRANSFER COMPACT

In the Commonwealth of Massachusetts, an Associate Degree from any two-year college signatory to the Commonwealth Transfer Compact is honored as a unit and is defined as the equivalent of 60 credit hours of undergraduate college level study including:

6 hours of English - communication
9 hours of behavioral - social sciences
9 hours of humanities - fine arts
9 hours of mathematics - sciences
All credits to be on a college level

Westfield State College honors this policy and will award, upon acceptance, the full number of credits earned while enrolled in the Associate Degree program.

FOREIGN STUDENT ADMISSION

Any foreign student seeking admission to the College must fulfill the requirements established for freshmen or transfer students. The Test of English as a Foreign Language (TOEFL) also is required of each applicant. Information on this requirement can be obtained from either the College Entrance Examination Board or the Educational Testing Service. All applications for admission from foreign students must be received by January 1 for entrance the following September. No foreign applicants are eligible for admission in the January entrance periods.

READMISSION

Students who leave Westfield State College because of academic failure are readmitted through the Registrar's office after enough courses in an approved program at another accredited college are taken to raise the cumulative quality point average to the level required based upon the college's academic standards (see Academic Standing).

Students who withdraw from the college in good academic, financial, and disciplinary standing may be readmitted through the Registrar's office, provided that their absence has been no longer than one year. Students absent longer than one year should apply for readmission through the Office of Admission. Students who have been withdrawn or dismissed by the college for disciplinary, financial, or other reason may not reenter until the conditions established at the time of withdrawal have been met.

Students who are seeking readmission should inform the appropriate office as early as possible prior to their return in order to facilitate course placement.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) /ADVANCED PLACEMENT (AP)

Academic credit or waiver of requirements may be granted based upon performance on the College Level Examination Program (CLEP) and Advanced Placement (AP) tests. Generally, students must attain a CLEP score at least equivalent to the 75 percentile of national norms established by the College Board, or an AP examination score of at least 3; however, specific standards and whether credit or waiver is granted are determined by the individual academic departments. Therefore, students should consult the appropriate academic department or the CLEP administrator (Wilson 234) concerning the relevant standards and policies. CLEP Tests are offered in areas fulfilling core requirements and in other subject areas as well. Students with questions regarding AP scores should consult the Director of Admission.

Credit or waiver of requirements will not be granted unless the examination is taken prior to enrollment in a course which is equivalent to the examination.

FINANCIAL AID

The primary purpose of the Financial Aid Office at Westfield State College is to insure that no student is unable to pursue his or her educational goals for lack of financial resources. Westfield State College participates in a wide variety of federal, state and private programs. Assistance can be in the form of gift aid (grants and scholarships) and

self-help programs (loans and work study). The Financial Aid Office Staff is available to assist students throughout the financial aid process.

POLICY AND CRITERIA

The policy and criteria for awarding financial aid are as follows:

1. The philosophy of financial aid is that the family has the responsibility to meet as much of the educational costs of their children as is reasonably possible. Financial Aid is a supplement to the family resources.
2. The Financial Aid Form (FAF) must be completed and mailed to the College Scholarship Service before March 1st. The FAF can be obtained from the Financial Aid Office at Westfield State College or from a High School Guidance Office.
3. In addition to the FAF, the Westfield State College Financial Aid Application, appropriate parent and student income verification, and Pell Grant Student Aid Reports must be submitted to the Financial Aid Office by April 1st. Students completing their files by the deadline will receive priority consideration. Files completed after the deadline will be awarded on a funds-available basis.
4. In order to receive financial aid a student must maintain satisfactory academic progress. Satisfactory academic progress is defined as the successful completion of a minimum of 24 credit hours of course work for each year of full-time attendance, 18 credit hours for 3/4-time attendance, and 12 credit hours for half-time attendance.
5. Financial aid awards are not automatically renewable. You must reapply each year.

FEDERAL PROGRAMS

Westfield State College participates in seven federal programs: Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Perkins Loan (formerly the National Direct Student Loan), College Work Study (CWS), Stafford Loan (formerly the Guaranteed Student Loan), Parent Loans (PLUS), and Supplemental Loans for Students (SLS).

STATE PROGRAMS

Westfield State College participates in five state programs: Massachusetts State Scholarship, Adult Learner Grant, Part Time Grant, Westfield State College Grant, and Financial Aid Tuition Waiver.

PRIVATE AND INSTITUTIONAL PROGRAMS

Westfield State College offers a variety of scholarships annually which are credited toward college expenses. These local scholarships are not based on financial need.

COSTS TO ATTEND WESTFIELD STATE COLLEGE*	ANNUAL
Tuition for Massachusetts Residents**	$ 1092.00
Tuition for out-of-state residents	$ 3930.00
Tuition under proximity clause of New England Regional Program	$ 1365.00
Residence Hall	$ 1772.00 to 2350.00
Meal Plan (19 meals per 7-day week)	$ 1112.00
Fees	
Student Activity	$ 62.00
Student Union	$ 70.00
Library	$ 40.00
Athletic	$ 113.50
Education Service Fee	$ 50.00
Health	$ 65.00
Commencement (one time fee)	$ 50.00
Freshmen Orientation (one time fee)	$ 40.00
Transfer Orientation (one time fee)	$ 9.50
Placement - Freshmen (one time fee)	$ 20.00
Student Teaching (in semester of practicum)	$ 100.00
Late Payment Fee	$ 25.00
Late Registration Fee	$ 25.00
Room Damage Deposit	$ 50.00
Parking Fee - Freshmen	$ 10.00
Optional - Student Health Insurance	$ 328.00
Books/Supplies	$ 400.00

Deposits (non-refundable) Tuition Deposit $ 50.00: Residence Hall Reservation Deposit $ 50.00

* These costs are shown for the 1989/90 academic year.

** Tuition is free for persons 60 years of age and over. Admission granted on a space-available basis. All fees are payable.

STUDENT SERVICES

The Division of Student Services publishes important policies and regulations each fall. Students are advised to obtain a copy of these policies and to review the contents. The Vice President for Student Services is located in Parenzo Hall, Room 103.

Westfield State College has a commitment to making our residential life program an important component of a student's overall educational experience. A variety of modern facilities and living arrangements are available, with each hall staffed by a full-time professional, student resident advisors, housekeeping, security, and governed by an elected Residential Life Council. The College also maintains a listing of off-campus housing and assists students in identifying roommates. However, the College does not evaluate or intervene in these arrangements.

A full dining plan is required for all residential students except apartment residents. Commuting students are welcome to purchase a meal plan or to purchase the 70-meal a-la-carte plan. Two snack bars also offer services on an a-la-carte basis.

Health Services are available 24 hours a day, along with an infirmary for overnight treatment. The College Physician is on campus on a regular part-time basis, providing treatment for minor ailments and referral on other problems.

CAREER PLANNING AND PLACEMENT

The Office of Career Planning and Placement focuses upon the student not only in the senior year or after graduation, but as an undergraduate. The purpose of the office is to assist students in self-assessment of interests and abilities, their development of employment skills, the exploration of occupational opportunities, as well as building a credential file for placement. For more information about the Career Planning and Placement Office, please see the Student Handbook or contact the Director in the Ely Building, Room 146, ext 206.

CENTER FOR PSYCHOLOGICAL SERVICES

The Center for Psychological Services provides individual and group counseling to students and other members of the college community. The Center is staffed by faculty in the Department of Psychology who have doctorates and training in clinical or counseling psychology.

All counseling is strictly confidential and without additional fee. The purpose of the Center is to help clients deal with interpersonal or intrapersonal concerns in an effective, positive manner, learn new coping skills, and gain greater self-understanding.

Appointments are made through the Director whose office is in Wilson 136. The phone extension is 376 or 378. Students are usually seen between 8 A.M. and 5 P.M.

VETERANS SERVICES

The Veterans' Affairs Office at Westfield State College is part of the Division of Student Services. The contact person is the Dean of Student Services, located in the Ely Campus Center, Room 130, Ext. 414.

The Veterans' Affairs Office provides an explanation of all benefits, a follow-up on claims with the Veterans Administration, a counseling service for day and evening students, and makes available several work-study grants for veterans.

ATHLETICS

Westfield State College has an extensive, quality program of intercollegiate and intramural athletics. Men's and women's teams compete under the umbrella of the National Collegiate Athletic Association (NCAA). In addition to fielding teams in Division III of the NCAA, Westfield State College holds membership in the Eastern College Athletic Conference (ECAC), the Massachusetts State College Athletic Conference (MASCAC), and the New England Collegiate Athletic Conference (NECAC). For additional information, please contact the Athletic Department in the Ely Building.

ACADEMIC AFFAIRS

ACADEMIC ADVISING

Academic advising is provided to each student to assist in understanding and interpreting college academic policies and requirements, major requirements, course selection and registration, and related academic opportunities and objectives. This does not remove the responsibility from students, however, to be knowledgeable about the academic requirements which they have to meet.

Students are assigned faculty advisors by the chairpersons of their major departments. Undeclared students are assigned advisors by the Coordinator of Academic Advising with whom they will work until declaring a major. Students generally meet with advisors at least once each semester prior to the registration period to discuss course selection and academic progress.

Changes in program also require the approval of the advisor. In addition, the staff of the Registrar's office, Advising Center, and the dean of undergraduate studies are also available to assist students.

URBAN EDUCATION PROGRAM

This program recruits high school and nontraditional students from diverse educational and ethnic backgrounds and provides these students with the academic and personal support to successfully complete their college program. Students who are recruited through this program participate in a pre-college summer bridge program aimed at enhancing basic skills and adjustment to the college environment. During the student's academic career, tutorial and counseling support are provided, as well as courses in critical thinking and writing and workshops in computer applications and career planning. The program is committed to encouraging ethnic diversity and greater understanding of multicultural issues at the college. For further information, contact the program's director in Wilson 235, extension 391.

ACADEMIC SUPPORT/SPECIAL SERVICES/TUTORING

Academic assistance and tutorial support is provided through the Department of Special Services. This is operated by professional staff and supplemented with approximately 70 peer tutors.

Formal instruction is offered in writing and study skills, mathematics, and English as a second language. Tutoring may also be arranged in all areas of the college curriculum. Workshops are also held in word processing, and software programs for computer-assisted instruction in specific content areas are also available.

The department also coordinates the provision of support services to students who are physically challenged or learning disabled.

For further information the office is located in Wilson 235, extension 391.

LIBRARY FACILITIES

The Governor Joseph B. Ely Library/Campus Center building houses more than 150,000 volumes, 900 periodical titles, 7,500 reels of microfilm and 300,000 units of microfiche and microcard.

Privileges at Area Libraries

Through a cooperative arrangement, Westfield State College students may register and borrow materials at the following libraries: American International College, Bay Path College, College of Our Lady of the Elms, Holyoke Community College, Springfield College, Springfield Technical Community College, Springfield City Library, Western New England College, Western New England Law Library, Westfield Athenaeum and the University of Massachusetts libraries.

NATIONAL EXCHANGE PROGRAM

The National Exchange Program provides an opportunity for selected sophomores and juniors (and occasionally seniors) to spend a semester at another college. Students pay the regular Westfield State College tuition and fees as though they were still here. No additional fees are assessed other than transportation, a portion of which is underwritten by the Student Senate.

The exchange program is being carried out with the University of Alaska (Fairbanks);

Arkansas Tech University; Delta State University(Mississippi); East Central State University (Oklahoma); University of Wisconsin -- Platteville; and the University of South Dakota (Vermillion).

Selections are made by a committee composed of students who have been involved with the program, appointees of Student Senate, and administrator(s). Students who apply should have a 2.25 cumulative average. For further information, contact the Assistant Director of Residential Life, Scanlon Hall, Residential Life Office.

STUDY ABROAD PROGRAM

The International Education program offers opportunities for most liberal arts majors interested in study abroad programs and limited opportunities for practicum placements for Education and Mass Communication majors.

The study abroad program includes pre-approved locations in England, Ireland, Italy, Mexico, Scotland, and Spain. Education Practicums are available in England, Ireland, and Greece. Special Arrangments have been made at other selected American Schools abroad.

A minimum grade point average of 2.75 is required as well as approval of the major department chair and the director of the program. General information meetings are held at the beginning of each term. Application deadline for fall term candidates is April 1 and for spring term candidates, November 1.

For further information, contact the director(s) of the program through the Dean of Undergraduate Studies.

COOPERATING COLLEGES OF GREATER SPRINGFIELD (CCGS)

The Cooperating Colleges of Greater Springfield (CCGS) offer students the opportunity to take a course at one of the participating area colleges at no additional cost. Colleges participating in this program are: Springfield College, American International College, Western New England College, Elms College, Springfield Technical Community College, and Holyoke Community College. For additional details please see the Registrar.

COLLEGE ACADEMIC PROGRAM SHARING (CAPS)

College Academic Program Sharing is designed to offer students the opportunity for an educational experience at another state college in Massachusetts. It is available to students in good academic standing and does not necessitate transferring. Students may take up to thirty credits (one or two semesters). The filing deadline is December 15 for the Spring Semester and May 15 for the Fall Semester. Freshmen are ineligible. Colleges participating in this program are: Bridgewater State College, Fitchburg State College, Framingham State College, North Adams State College, Salem State College, Westfield State College, Worcester State College, Massachusetts College of Art, and The Maritime Academy. For details please see the Registrar.

RESERVE OFFICERS TRAINING CORPS (R.O.T.C.)

ARMY R.O.T.C.

Westfield State College, in cooperation with Western New England College and The University of Massachusetts, offers R.O.T.C. (Reserve Officers Training Corps) Program leading to the rank of Second Lieutenant in the active Army, Army Reserve, or the Massachusetts National Guard. The program is directed by the United States Army and is available to all students. Actual courses are taken off-campus, primarily at Western New England College, through the Cooperating Colleges of Greater Springfield.

AIR FORCE R.O.T.C.

The Air Force Reserve Officers Training Corps (AFROTC) does not have its own program at Westfield State College; however, students can take the program while attending Westfield State College through the Cooperating Colleges of Greater Springfield (CCGS) agreement. The agreement allows students to take AFROTC courses at Western New England College in Springfield. Freshmen and sophomore courses can be taken without any commitment to the Air Force, and a 2-year program is available for any interested sophomore who decides to pursue the program during the spring of that year. Upon successful completion of the program (and receipt of a bachelor's degree), graduating students will receive commissions as Second Lieutenants in the U.S. Air Force. 3 1/2, 3, 2 1/2, and 2 year scholarships paying full tuition, lab, incidental fees, and $100.00 per month during school are available to students in all academic majors. Books are provided by the AFROTC. For additional information, contact the Professor of Aerospace Studies, (413) 545-2437/2451, at the University of Massachusetts.

THE DIVISION OF GRADUATE STUDIES AND CONTINUING EDUCATION

The Division of Graduate Studies and Continuing Education offers programs in three areas: graduate studies, undergraduate studies (part time), and credit-free programs. Graduate programs include the Master of Arts in English and Psychology, the Master of Science in Criminal Justice, the Master of Education in 13 different concentrations, and the Certificate of Advanced Graduate Study in four education concentrations. In addition, the Division offers a post-baccalaureate teacher certification program which enables students already holding a bachelor's degree to receive certification.

Undergraduate programs are offered in every major available to Day Division students. Generally, necessary courses are offered in the evening, although some courses may have to be taken in the day division. Students who are pursuing their degrees part-time (less than 12 hours per semester) generally matriculate through the Division of Graduate Studies and Continuing Education. Financial Aid is available for students in degree programs pursuing part-time study.

The credit-free program provides professional development programs such as the Administrative Assistant and Paralegal Certificate programs, as well as a variety of home and business computer courses and personal enrichment courses.

Credit and credit-free courses in the evening are available to day students. However, because by law the Division must be financially self-supporting, students pay the established tuition and registration fees for the Division's courses.

For more information, contact the Division at (413)568-1992 or stop by the office, Parenzo 108, 9:00am - 7:00pm daily, 9:00am - 5:00pm Fridays.

SCHOLASTIC REQUIREMENTS

COURSE LOAD

Fifteen (15) credit hours per semester is the normal academic course load of students at Westfield State College. Students may enroll for up to eighteen (18) credit hours without special permission; however, students wishing to enroll for more than eighteen credit hours must secure the permission of their advisor, Department Chair, and the Undergraduate Dean. Course overload permission forms are available at the Registrar's Office. As a guideline from the Academic Policy Committee, the maximum course load a student may carry in a given semester is 21 hours including both day and evening courses and programs. A student should have a minimum Q.P.A. of 2.50 to carry 19-20 credit hours and a minimum Q.P.A. of 3.00 in order to carry 21 credit hours.

Twelve (12) hours a semester is the minimum load for full-time day students. Eighth semester seniors are permitted exception to this rule.

Students carrying less than 12 hours lose their eligibility for residence hall space and cannot represent the College in cocurricular activities. Financial aid awards may also be affected.

GRADES AND CREDITS

Quality Point System

The cumulative quality point average is computed at the end of each semester. The points scored in all courses since matriculation are averaged. The number of quality points which a student receives in a course is determined by multiplying the total number of semester hours in the course by the numerical value of the grade. The average is computed by dividing the sum of all quality points by the sum of all semester hours attempted.

Westfield State College uses a quality point system of:

A.....4.0	B.....3.0	C.....2.0	D.....1.0
A-....3.7	B-....2.7	C-....1.7	F.....0.0
B+....3.3	C+....2.3	D+....1.3	

Grades of "F" can never be removed, but the subjects in which they have been received may be repeated and passed, or, in the case of electives, other approved courses must be taken and passed either in approved Summer Sessions, or when possible during the regular college year. In these cases, both grades will appear on the transcript and will be used in the calculation of the quality point average.

Incomplete Grades

The grade of "I" (incomplete) is only to be assigned when 80% of the course work has been completed for a specific course. "I" grades become "F" grades unless the course work is satisfactorily completed during the first four weeks of the next semester. Under certain circumstances the deadline to complete "I" grades can be extended or reduced. Special permission forms to extend the deadline to complete the course work for "I" grades can be obtained at the Registrar's Office. The college's Committee on Academic Probation and Retention may require students to complete the course work on "I" grades early to determine if they are eligible to return to Westfield State College.

ACADEMIC PROBATION

Students who fall short of the required cumulative quality point average for their class standing (see below) at the end of their first semester or generally the first semester of each academic year are placed on Academic Probation for one semester. A student cannot be on Academic Probation for two consecutive semesters. Students are removed from academic probation in the following fall semester if they are in good academic standing.

Any exceptions to the foregoing policy based upon extenuating circumstances may be appealed to the Committee on Academic Retention and Probation.

Students who are placed on academic probation can only register for 12 semester hours of credit and will be prohibited from participation in all co-curricular activities during the semester in which they are on probation. Students cannot be on Academic Probation for two (2) consecutive semesters. Co-curricular activities include intercollegiate athletics, intramural sports, clubs, social organizations, MTG, The Owl, Tekoa, WSKB, In Focus, student government organizations, or any other campus activity not directly connected to the requirements of a specific course. Students who violate this policy are subject to disciplinary action, and organizations which allow a student on probation to participate may jeopardize their funding or ability to function.

This policy is administered by the Committee on Academic Retention and Probation which consists of the following (or their respective designees):
Registrar (Chairperson)
Vice President for Academic Affairs
Vice President for Student Services
Dean of Undergraduate Studies
Director of Minority Affairs
Coordinator of Academic Advisement

Written appeals should be filed with the Registrar.

ACADEMIC RETENTION AND DISMISSAL

At the close of each academic year, each student whose cumulative quality point average falls below that required for his or her class standing is subject to academic dismissal. In the case of any student who has, for any reason, not completed at least two semesters of study at the College at the close of a given academic year, this procedure shall first apply at the close of his or her second semester of study (but, thereafter, it shall apply at the close of each academic year). Freshmen shall not be retained by the College if they have achieved less than a 1.0 cumulative average after their first semester. Transfer students shall not be retained by the College if they have achieved less than a 1.0 cumulative average after their first semester.

ACADEMIC STANDING

Students must maintain the appropriate quality point average for their class to continue at Westfield State College. All quality points are cumulative.

A student must obtain a cumulative quality point average of 1.5 for the Freshman year. (Attempted 36 credits or less)

A student must obtain a cumulative quality point average of 1.75 for the Sophomore year. (Attempted 37 to 66 credits)

A student must obtain a cumulative quality point average of 2.0 for the Junior year. (Attempted 67 credits or more)

A student must obtain a cumulative quality point average of 2.0 for the Senior year to be eligible to graduate.

A student's academic performance also is unsatisfactory if he or she has received the grade of "F" in three or more courses during a given semester.

ACADEMIC HONORS

The Honors Program

The Westfield State College Honors Program aims to provide interested and qualified students an avenue of advancing in the major field as far as their ability and enthusiasm will allow. A detailed brochure is available upon request.

Dean's List

In order to be cited by the Registrar for academic honors known as the Dean's List, a student must have:
1. An average of "B+" (3.3) or above during the semester.
2. No grade below "C" (2.0).
3. A program of at least 12 semester hours.
4. No grade of Incomplete.

Graduation Honors

Cum Laude 3.30 to 3.59
Magna Cum Laude 3.60 to 3.79
Summa Cum Laude 3.80 or better

Students eligible for graduation honors must have attended Westfield State College for a minimum of two (2) years (60 credit hours).

All transfer students in order to qualify for graduation honors must have all their collegiate academic credits computed to determine their cumulative quality point average.

PROCEDURES FOR PROGRAM CHANGES

Withdrawing from Courses

Students who enroll in a course have one week to decide to withdraw without notation on their records. Students who withdraw between the second and the eighth week of a regular semester will have no penalty as far as the cumulative average is concerned, but will have a notation of "W" on their permanent records. No student may withdraw from any course during the semester after the eighth week, unless there are extenuating circumstances, such as hospitalization. Courses that are scheduled for eight weeks may be dropped only during the first four weeks that the course meets and section changes and course additions for these condensed courses may be made only during the first week of the course. Students not attending or unofficially withdrawing from a course will be issued an "F" grade on their record. This "F" grade will be used in computing the student's semester and cumulative average. COURSE DROP ONLY FORMS CAN BE OBTAINED IN THE REGISTRAR'S OFFICE.

Adding Courses

Students may add courses to their schedules during the first week of each semester. Please review the ADD procedure in the Course Offering Booklet.

Declaration of Major

All students should be accepted into a major by the beginning of their junior year, or they may be subject to dismissal or denied permission to register for courses. In accepting students the college has an obligation to provide a complete program of study, including a major. However, the college may not be able to guarantee that there will be space available in all majors. Departments may establish specific requirements for entrance and retention in a major. Students should consult the intended department, the Office of Academic Affairs, or the Advising Center.

Changing a Major

Students wishing to change their majors must secure a "Change of Major Form" from the Registrar's Office. This form requires the approval of the Chair of the new department and release from the Chair of the original department .

CLASS ATTENDANCE

The student classroom attendance regulations shall be determined individually by each member of the faculty who is responsible and accountable for stating these regulations clearly in writing at the beginning of each course of instruction. Students may be dropped from any class if they fail to attend during the first week.

EXAMINATIONS AND FINALS

All students are required to take each and every examination assigned by their instructors at the designated time and place. A final examination schedule is posted each semester. When a student misses a final examination with a valid reason, but has met all the other requirements of the course, the Incomplete grade is assigned. If a student misses an examination, instructors may offer a "make-up" examination at their discretion.

REQUIREMENTS FOR GRADUATION

Only students who have met the following requirements will graduate:
1. A cumulative quality point average of 2.00 or better.
2. A cumulative quality point average of 2.00 or betterin the major. Major requirements are those in effect at the time the student matriculates into the major. (effective with the class of 1993)
3. 120 successful credits. Successful credits require a grade of "D" or better.
4. CORE requirements must be completed successfully.
5. Requirements of a major must be completed successfully.
6. Where a student has received an "F" in a required course, that course must be retaken; another course may be substituted if it would meet the same requirement.

Students should check with their advisors before the senior year to insure that all of these requirements for graduation are met.

Procedures for Graduation

All students wishing to graduate at the end of the Spring semester must make formal application for graduation at the Registrar's Office by March 1. Students wishing to graduate in August must make formal application by July 1, and those wishing to graduate in January must make formal application by November 1.

It is the responsibility of each senior student to provide the Registrar with information and official transcripts concerning all course work completed outside the Westfield State College day division.

PROCEDURE FOR WITHDRAWING FROM COLLEGE

Students leaving the college, either during a semester or between semesters, must complete WITHDRAWAL FORMS which may be obtained in the Registrar's Office. Students withdrawing from the college will receive a "W" in each course. Students who leave the college during a semester and do not "Offically Withdraw" will receive "F" grades in all courses.

CERTIFICATION FOR TEACHING

All graduates who satisfactorily complete the requirements of a college-approved program for teacher certification and complete the appropriate application materials are recommended by the Associate Dean for Academic Affairs for certification to the Massachusetts Department of Education.

The Commonwealth is in the process of changing teacher certification requirements. Students currently in teacher certification programs must complete all requirements by September 1, 1993, in order to receive certification under the old requirements. Freshmen entering in September, 1989, will enter under new requirements and will be eligible for provisional certification upon completion of program requirements. These students must complete a liberal arts or sciences major or approved interdisciplinary major, together with education coursework. Full certification under the new regulations will require a clinical master's degree. Entering transfer students will be advised into the old or new program based upon an evaluation of their prior work. If transfer students are following the old program, they must complete requirements by September 1, 1993, to be certified.

For further information, contact the Associate Dean for Academic Affairs in Parenzo 107 or the college's Department of Education in Parenzo 213.

REQUESTING TRANSCRIPTS

Transcripts are issued by the Registrar with written permission from the student. The cost of a transcript is the one dollar ($1.00) fee. Telephone requests are not accepted. Official copies are not issued to students or graduates.

POLICIES OF WESTFIELD STATE COLLEGE

Students should also review the Policies and Regulations found in the Student Handbook which is published by the Division of Student Services.

ACADEMIC FREEDOM AND RESPONSIBILITY

The Board of Trustees and the Massachusetts Teachers Association/NEA endorse the principles and standards of academic freedom and academic responsibility as generally and traditionally accepted in institutions of higher education. They agree to promote public understanding and support of academic freedom and agreement upon procedures to assure academic freedom in colleges and universities. Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition. Academic freedom is essential to these purposes and applies to both teaching and research.

Academic freedom is the right of scholars in institutions of higher education to study, discuss, investigate, teach, exhibit, perform, and publish. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and of the student in learning.

The teacher is entitled to full freedom in research and in the exhibition, performance, and publication of the results of his/her research, to full freedom in the classroom in discussing his/her subject, and most specifically in the selection of classroom materials including selection of texts. The teacher is entitled to discuss controversial issues. As both a teacher and scholar he/she recognizes a professional obligation to present various scholarly opinions and to avoid presenting totally unrelated materials.

Faculty members have the right to determine the amount and character of the work and other activities they pursue outside the College provided such work and other activities do not interfere with the discharge of their responsibilities.

ACADEMIC HONESTY POLICY

Academic honesty is expected of all students. Plagiarism and cheating are not condoned and are subject to an academic penalty, which may be failure for the course in which the violation took place. A record of the violation is submitted to the Office of Academic Affairs and repeated offenses may result in suspension or dismissal from the College.

Violations of academic honesty include cheating on examinations, plagiarism, and submission of papers for credit in two or more classes. This listing is illustrative.

Examinations

Violations of academic honesty with regard to examinations consist of the following:
1. Receiving assistance or assisting others while the examination is in progress.
2. Obtaining or attempting to obtain previous to an examination, copies of the examination or the questions to appear on the examination.
3. Obtaining or attempting to obtain any unauthorized knowledge regarding the exam or the questions to appear on the examination from another student who possesses information regarding the contents of the exam.
4. Disseminating any written or verbal information regarding the contents of an examination to students who have not yet completed or taken said examination.
5. Utilizing or consulting any unauthorized information, such as notes or books, during an examination.

Plagiarism

Plagiarism will not be tolerated. Plagiarism consists of utilizing the work, words, or ideas of another person as if they were your own. All papers must have proper footnotes and references.

Multiple Submissions of a Single Paper

Instructors are not required to accept a term paper submitted in other courses, i.e., a student may not submit the same research paper for credit in two classes within the college without prior written consent from both instructors.

COURSES TAKEN AT OTHER INSTITUTIONS AFTER MATRICULATION

For day students to be granted credit for courses completed at Westfield State College

Continuing Education Division or at any other college, prior permission must be obtained in writing from the chairperson of the students major department and the chairperson of the department wherein the course to be taken lies. COURSES NOT IN THE COMMON CORE (UPPER LEVEL COURSES) CANNOT BE TAKEN AT A COMMUNITY OR JUNIOR COLLEGE.

Students should note that such permission is granted under conditions specified by the major chairperson prior to registration.

College courses taken without this written permission will not be credited on the student's academic record until such permission has been granted. Any grade of "D" or better is acceptable for transfer credit. NOTE: a grade of "D-" is unacceptable for transfer credit.

DIRECTED/INDEPENDENT STUDY

Students desiring to enroll in departmental Independent Study projects must process a Registration Form, Independent Study, Course of Instruction Offered by Special Arrangement form which is available in the Registrar's Office. This form requires a description of each project and must be approved by the faculty member, department chairperson, and the dean of undergraduate studies. FRESHMEN ARE INELIGIBLE. Students may take only one independent study in any given semester and not more than four in their undergraduate work here at Westfield State College. Students must register for the Independent Study credits within the first three (3) weeks of the semester.

DRUG POLICY

1. The Westfield State College Board of Trustees in upholding State laws and regulations and in supporting the mission of the College requires its agents to enforce College regulations regarding the unlawful use or possession of controlled substances, drugs or drug paraphernalia on the Westfield State College campus. Any student found in possession of an illegal drug substance or drug related paraphernalia and found guilty of such possession shall (this applies only to first-time offenders) remain as a student on a probationary basis provided the student completes a drug rehabilitation program prescribed by the Office of Student Services at the student's expense.

2. Any student found guilty of a second offense of possession of an illegal drug substance or illegal drug paraphernalia shall be suspended from the College for the remainder of the semester and the next full semester with the possibility of returning to the College pending drug counseling and by the decision of the Vice President for Student Services with no right of return after a third offense.

3. Students found guilty of the sale or distribution of controlled substances or drugs on the Westfield State College campus by the College Student Judicial System will immediately be suspended from College for the current semester plus one (1) complete Academic year.

Students may apply for readmission through regular College procedures on written recommendation from an ad hoc committee of students and administrators appointed by the Student Senate President and the Vice President of Student Services to review the case. The review will include, but not be limited to, documentation from the student that he/she has undergone drug counseling. The student, if readmitted, will be on a probationary status for one year with no right of return after a second offense.

4. A comprehensive process of dissemination of this policy shall include its inclusion in the Student Handbook, the College Catalog and other appropriate publications; its discussion at all orientations of new and transfer students; and its regular review and dissemination by resident and student services staff.

GRADE APPEALS

If a student wishes to appeal a grade, the appeal must be initiated through the Academic Affairs Office by the end of the fourth week of the following semester.

GRADUATION CEREMONY PARTICIPATION

At the discretion of the Vice President of Academic Affairs, students who have completed between 114 and 119 semester hours of credit may be allowed to participate in graduation ceremonies provided they make a written appeal (to the Vice President) and are able to complete the required credits to graduate by August following the ceremony.

HAZING LAW - CHAPTER 665

Students are advised to be familiar with the Massachusetts General Laws, Chapter 269, Sections 17, 18, and 19 relative to the crime of hazing. A copy of the law is printed in

the Student Handbook. Once a year a copy of the law is distributed with the billing and students must sign the billing statement to acknowledge receipt of the law.

POLICY OF NON-DISCRIMINATION

Westfield State College, both as an employer and as an educational system, is committed to the principles of non-discrimination and equal opportunity for all persons. These commitments are actively pursued in all aspects of both campus and community relationships.

Westfield State is committed to a policy of affirmative action in its educational programs, activities and employment practices.

The College maintains and promotes a policy of non-discrimination on the basis of race, religion, color, sex, age, handicap, marital status, or national origin. This policy incorporates by reference the requirements of Federal Executive Orders 11246 and 11375 as amended; the Civil Rights Act of 1964 as amended; Title IX of the Educational Act of 1972; Section 503 and 504 of the Rehabilitation Act of 1973; Section 402, Vietnam Era Veterans Readjustment Assistance Act of 1974; and pertinent Laws, Regulations and Executive Directives of the Commonwealth of Massachusetts, including regulatory procedures set forth under Chapter 820 of the Acts of 1973; and other applicable state and federal statutes.

QUALITY POINT AVERAGE (MINIMUM) IN THE MAJOR

Effective with the class of 1993 a student shall be required for graduation to have a quality point average of 2.00 in their major. Major requirements shall be those specified in the College Bulletin or most currently published program materials of the department.

SEXUAL HARASSMENT POLICY

Sexual harassment in educational institutions is not simply inappropriate, undermining the integrity of academic and employment relationships; it is also against the law. Both the Federal Courts and the Equal Employment Opportunity Commission (EEOC) have ruled that sexual harassment constitutes a form of sex discrimination, as defined under Title VII of the Civil Rights Act of 1964 and included in Title IX of the Educational Amendments of 1972.

Sexual harassment consists of unsolicited verbal, nonverbal and/or physical contact which has the effect of interfering with student or employment status or creating an intimidating, hostile, or offensive environment. Behavior may be considered sexual harassment when: 1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education; 2) submission to or rejection of such conduct is used as the basis for academic or employment decisions affecting that individual; and 3) such conduct has the purpose or effect of interfering with an individual's academic or professional performance or creating an intimidating, hostile, or offensive employment, educational or living environment. Many relationships in a college community are, by the nature of the roles people have, unequal, for example, between student and administrator or faculty member or between staff member and supervisor. Members of the college community should be sensitive to the existing inequalities that exist within these relationships and should be careful not to abuse them.

Westfield State College is committed to promoting an environment free from any form of harassment, to educating the community regarding sexual harassment, and to taking prompt and corrective action, including appropriate disciplinary action, where sexual harassment has occurred.

If any member of the college community believes he or she has been the victim of sexual harassment, he or she should seek the assistance of the Affirmative Action Officer, a member of the Affirmative Action Advisory Committee, or any member of the college's staff. It is important that the harassment not be allowed to continue. Several procedures have been set up by the college to resolve these problems. First, the individual may seek informal resolution of the problem through the Affirmative Action Officer. With the individual's consent, the Affirmative Action Officer will meet with all parties in an effort to secure a prompt and equitable resolution and shall transmit his/her findings and recommendations to the parties in writing. An individual may also pursue formal procedures by filing a written complaint within 40 days of the event upon which the complaint is based. In these procedures a formal hearing and investigation is conducted and a written response is submitted to all parties. The formal hearing is conducted by the Affirmative Action Officer, but findings may be appealed within 10 days of receipt of the findings to the Chief Administrative Officer of the individual accused in the complaint, and beyond that, to the President of the college. Due process shall be followed in these hearings, including the right to a copy of the charges prior to the

meeting, the right to have representation present in an advisory capacity, the right to present evidence and witnesses, the right to question, and the right to receive a written copy of the findings and recommendations. The decision to seek resolution through the college's procedures shall not prevent an individual from filing charges with the appropriate federal or state agency.

For more information, contact the college's Affirmative Action Officer, Parenzo 104, extension 216.

MEDICAL HISTORY FORM AND EVIDENCE OF IMMUNIZATION

New students are required to furnish a medical history form and evidence of appropriate immunizations as a condition of matriculation (Massachusetts General Laws, Chapter 76, Section 15C). The college regards these materials as a part of the registration process. Students who do not submit such evidence by the date established by the college may be assessed a late registration fee. The college reserves the right to administratively withdraw any student who has not furnished evidence of immunization within 10 days after the start of classes. Students who are administratively withdrawn may not reenter until the following semester and then, only upon payment of a re-entry fee and submission of the required forms.

COLLEGE POLICY CONCERNING PAYMENT OF BILLS

The College expects that all bills will be satisfied by the due date as stated on the bill. Generally, bills can be satisfied in one of the following three ways:

1. A student may pay his/her bill in full; or
2. A student has financial aid, scholarships, waivers, etc., which, with payment, will cover the bill; and/or
3. A student or parents may have a contract with the College payment plan, Academic Management Services, Inc., and such contract will satisfy the bill.

Bills not satisfied by the due date will be assessed a late payment fee.

Students who are unable to satisfy their bills must contact the College Bursar at extension 258 to make appropriate arrangements.

Failure to meet these requirements will result in administrative withdrawal from the College. Students will lose all rights and privileges as students at Westfield State College and will not be allowed reinstatement until the beginning of the next academic semester and upon payment of a $50.00 re-entry fee.

PRIVACY AND CONFIDENTIALITY REGULATIONS

Privacy and Confidentiality regulations are promulgated pursuant to the provisions of General Laws Chapters 73 and 15, Section 20A, and the requirements of General Laws Chapters 66A, 30 (Section 63), and Chapter 214 (Section 3B), all as inserted by Chapter 776 of the Acts of 1975. The procedures set forth provide for the manner in which members of the College community and others shall have access to personal data in the possession of the State College.

For full details on the Privacy and Confidentiality Regulations please see the complete copy of the regulations posted at the college and/or contact the Office of the Vice President, Student Services.

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act of 1974 which took effect on November 19, 1974, assures confidentiality of education records containing information directly related to a presently enrolled student, a former student or alumnus/a.

The institution, according to the Act, may make public "Directory Information" about a student e.g., name, address, date and place of birth, telephone listings, schools attended, degrees and awards received, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, and the most previous educational agency or institution, unless the student specifically requests in writing that his/her prior consent be obtained.

A request made by students to suppress from public distribution the above mentioned information is to be made in writing annually to the office of the Vice President, Student Services, no later than October 1 of the academic year for which the information is being made public.

Further information on the Family Education Rights and Privacy Act of 1974 may be obtained from the Office of the Vice President, Student Services, or the Registrar.

WITHDRAWAL REFUND POLICY

Commitments to faculty, staff and other costs of operation are made by the College in advance of the school year. They are based on anticipated student enrollment and residence hall occupancy and are not subject to change.

To be eligible for a refund, a student must formally withdraw from the College (see Procedure for Withdrawing from College). The amount of refund will be determined on the basis of the official date of written withdrawal. Forms may be obtained in the Office of the Registrar.

Owing to the extremely heavy clerical demands during registration and the beginning of a semester, refunds should not be expected until at least four weeks after the start of a semester.

If a student withdraws from the College after paying his/her fee bills, refunds are allowed as follows:

Tuition Refund, New Students
Prior to the beginning of classes all tuition fees minus the $50. initial deposit.
Within the first week 66%
Within the second week 50%
Within the third week 33%
After the third week NONE

Tuition Refund, Returning Students
Prior to the beginning of classes 100%
Within the first week 66%
Within the second week 50%
Within the third week 33%
After the third week NONE

Board

Refunds for board are made on the same basis as tuition refunds for returning students. They will be made by the Food Service Concessionaire for commuters and for College Apartment residents. Students in the residence halls should see the College Bursar.

Room

All Residential Life and College Apartment residents have occupancy agreements. See the Housing Office for information on withdrawal prior to occupancy, withdrawal during term of agreement, and individual exceptions. Refunds normally are tied to both written notification of intention to withdraw and to the College's ability to fill the vacancy created by the resident's withdrawal.

Other Fees

There will be no refunds on the following after classes begin: Student Activity Fee, Athletic Fee, Student Union Fee, Library Development Fee, Orientation Fee, Placement Service Fee, Educational Service Fee, Health Fee and Parking Permit Fee.

COLLEGE MISSION

Westfield State College is continually in the process of developing and fulfilling the legislative mandate of the Commonwealth of Massachusetts to provide educational programs, research, and continuing scholarship in support of its primary teaching mission, continuing education services in support of lifelong learning, and service to the western Massachusetts region. Degrees are offered in the liberal, fine, and applied arts and sciences as well as other related disciplines through the master's degree and certificate of advanced graduate study. In the development of new programs, the college seeks to be responsive to changing societal needs and career patterns, while retaining its basic character as a liberal arts and sciences institution. The college's service to students outside of the formal academic program supports the basic objective of providing a comprehensive educational experience. In its educational programs, admission practices, and hiring, the college is committed to affirmative action and equal opportunity regardless of race, color, creed, sex, age, handicap, religion, national origin, or economic status.

EARNING A DEGREE

COURSES OF STUDY

Westfield State College students may major in one of the following areas (see department course listing for specific major requirements):

Applied Chemistry
Art
Biology
Business Management
Computer Science
Criminal Justice
Economics
English
French
General Science
History
Liberal Studies
Management Information Systems
Mass Communication
Mathematics
Music
Physical Education
Political Science
Psychology
Regional Planning
Social Science
Spanish

Westfield State College students may also minor in any of the areas listed above and also in the following:
Chemistry
Secondary Education
Sociology/Social Work
Geography
Speech and Theatre Arts
Journalism
Women's Studies
Latin American Studies
Philosophy

(A complete listing is available in the college application.)

COURSE PATTERN FOR A DEGREE

One hundred and twenty credits are required for graduation. They are obtained through the following pattern which is used as a guide for every student 's course of study. The pattern consists of three segments:

1. The General Core: This segment is required of all students and includes the following:

English Composition 6
Math and Science 10
State and Local History 3
Social Sciences 9
Fine Arts 6
Intellectual and Moral Criticism 6 Total 40

2. Major: Courses in this segment are prescribed by the department wherein the major is housed and total approximately forty hours of credit. For specific major program requirements, see the departmental section in this catalog.

3. Electives: Courses are selected by students depending on their own interests except for the major in elementary education/special education. A total of forty hours or more may be acquired in this segment.

The foundations of the General Core are disciplinary forms within which students select specific courses. The goals of the General Core are to introduce students to areas of study which are seen as necessary ingredients for a cultivated, humane life.

In meeting the requirements of the General Core, Westfield students acquire:
1. The capacity to communicate clearly in one or more natural languages
2. The capacity for intellectual and moral criticism
3. An appreciation of the fine arts
4. An understanding of the machinery of state and its history
5. The capacity for social understanding
6. An understanding of natural science
7. An understanding of mathematical reasoning.

GENERAL CORE OF STUDIES

HUMANITIES SECTION

1. Communications (6 hours)

English	EN 101 & 102	English Composition I & II

2. Intellectual and Moral Criticism (6 hours)

Philosophy	PH 101	Intro. to Soc. & Pol. Philosophy
	PH 102	Intro. to Ethics
	PH 104	Great Philosophical Issues
	PH 107	Major Religions of the West
	PH 108	Major Religions of the East
	PH 110	Intro. to Philosophy of Science
Literature	EN 213	Major British Writers
	EN 215	Major American Writers
	EN 221 - 222	World Literature I & II
	EN 228	Introduction to Shakespeare
Language	LF 101 - 102	French I & II (both needed for core crt)
	LF 103 - 104	French III & IV
	LF 120	Intensive French
	LF 200	French Conversation
	LG 101 - 102	German I & II (both needed for core crt)
	LG 103 - 104	German III & IV
	LG 120	Intensive German
	LG 200	German Conversation
	LI 101 - 102	Italian I & II (both needed for core crt)
	LI 200	Italian Conversation
	LL 100	Essentials of Latin
	LL 101	Intro. to Study of Language
	LP 101 - 102	Portuguese I & II (both needed for core crt)
	LS 101 - 102	Spanish I & II (both needed for core crt)
	LS 103 - 104	Spanish III & IV
	LS 120	Intensive Spanish
	LS 200	Spanish Conversation
	LE 101	French Culture
	LE 102	German Culture
	LE 103	Italian Culture
	LE 104	Hispanic Culture

3. Appreciation of Fine Arts (6 hours)

Art	FA 106 - 107	Art Survey I & II
	FA 104	Design Fundamentals
Music	MU 101 - 103	Music Appreciation
	MU 110 - 111	Basic Music Theory
	MU 160	History of Jazz
	MU 107	Music in America
Drama	EN 104	Introduction to Theatre

SOCIAL SCIENCE SECTION

1. State and Local Government (3 hours)

	HI 130	U.S. History and Government
	PL 101	American National Government

2. Social Understanding (9 hours - 6 maximum in one area)

Economics	EC 101	Principles of Macroeconomics
	EC 102	Principles of Microeconomics
Geography	GP 101	Principles of Geography
History	HI 101 - 102	Western Experience I & II
	HI 150	History of Non-Western World
Political Science	PL 101	American National Government
	PL 103	State and Local Government
Psychology	PY 101	General Psychology
Sociology	SO 101	Principles of Sociology

ANALYTICAL SCIENCE SECTION (10 hours including one (1) math and one (1) lab science)

1. Natural Science

Physical Science	PS 101	Physical Science
	PS 104 - 105	Physical Geology & Lab.
	PS 106	Historical Geology
	PS 107	Intro. to Chemistry
	PS 109 - 111	General Chemistry I & II
	PS 113	Introduction to Physics
	PS 115 - 117	General Physics I & II
	PS 119 - 121	Physics I & II
	PS 133	Astronomy
Geography	GP 102 - 103	Physical Geography & Lab.
Biology	BI 102	Environmental Biology
	BI 104	Biology of Organisms
	BI 106	Inheritance & Development

2. Mathematical Reasoning

Mathematics	MA 104	Precalculus
	MA 105 - 106	Calculus I & II
	MA 108	Elementary Statistics
	MA 110	Mathematical Explorations
	MA 111	Mathematical Applications
	MA 115	Math. for Bus. & Soc. Sci.
	MA 127	Calculus for Bus. & Soc. Sci.
	MA 150	Foundations Sets & Logic
	MA 251	Foundations/Geometry
	MA 252	Foundations/Prob. & Stats
	MA 253	Foundations/Number Systems
	PH 103 - 206	Symbolic Logic I & II

DEPARTMENTAL PROGRAMS

In this catalog, there are separate sections for each department and interdisciplinary major within the College. Departments are listed alphabetically; the interdisciplinary majors - that is, majors without departmental status or departmental staff - follow.

Not every course in the following listing is offered annually. Definite information about course offerings and class hours is available at the time of registration through the Office of the Registrar. Insufficient enrollment or changing conditions may occasionally necessitate the withdrawal of scheduled courses.

Please check with appropriate departments to determine if the courses sought are being offered and when they are scheduled. This will be important in planning a program of classes for the year, and for designing a four-year program in order to meet degree requirements.

The course numbering system is as follows:
100 Lower Level Courses
200 Upper Level Courses (Undergraduate credit only)
300 Upper Level Courses
400 Graduate Credit courses only

ART

The emphasis in the visual arts program is placed on the development of a strong two-dimensional capability through drawing and painting.

In addition to the major program, the Art Department offers various minors and concentrations. Internships are available in the commercial art concentration as well as the teaching certification concentration. All courses are open to students who meet the proper prerequisites.

The Arno Maris Art Gallery, located in the college library, is staffed by the Art Department and presents national and international exhibitions, as well as an annual student exhibition. The department also maintains a College Collection containing many fine works of art which are exhibited periodically.

The art studios are open to all art majors for all of their studio-related projects. Students may participate in various fine arts clubs which, along with the Department, sponsor field trips to area museums and galleries throughout the year. Field trips to galleries in New York City and Boston are a regular part of student activities.

REQUIREMENTS FOR ART MAJORS

Required art courses include:
FA 101 Materials and Safeguards in Art (1)
FA 103 Drawing I (3)
FA 301 Drawing II (3)
FA 104 Design Fundamentals (3)
FA 201 Printmaking I (3)
FA Art History (3)
FA 209 Theory of Color (3)
FA 204 Pottery I (3)
FA 205 Sculpture I (3)
FA 102 Painting I (3)
FA 202 Painting II (3)
FA Advanced Painting (3)
FA Advanced Studio in Pottery, Painting, or Sculpture (3)
FA 330 Anatomy for Artists (3)

Art majors must take 46 credits within the department. They are advised to follow the suggested sequence of courses for majors and general core requirements.

Art majors intending to pursue graduate work beyond the major are advised to take additionaly recommended studio courses of their choice. It is also advisable to include more than the minimal requirements in Art History.

ART MAJOR COMMERCIAL ART CONCENTRATION

For the Art Major who is interested in a career in commercial art or advertising, the following program concentration is recommended.

Commercial Art Courses 15 credit hours (from the following courses)

FA 206 Lettering and Layout
FA 210 Typography
FA 328 Graphic Design I
FA 329 Illustration I
FA 343 Illustration II
FA 344 Graphic Design II

The Commercial Art Practicum, of 6-12 credits, can be taken upon completion of the 15 required credits. It consists of an 8-16 week on-the-job experience in a commercial art advertising agency.

Acceptance into the Art Education Certification Program is contingent upon a formal application filed with the Program Coordinator and signed by both the Program Coordinator and the Art Department Chairperson.

A minimum cumulative grade point average of 2.75 and minimum B- average in pre-practicum course work is required for practicum placement (student teaching).

CERTIFICATION REQUIREMENTS FOR TEACHER OF ART (K-9, 5-12)
(These are in addition to the major requirements)

PY 301 Child Psychology (3)
or
PY 302 Adolescent Psychology (3)
ED 170 Education of Exceptional Children (3)
FA 322 Art Education Curriculum (3)
FA 324 Art Methods and Materials (3)
FA 345 Criticism (3)
FA 310 Workshop in Crafts (3)
FA 323 Introduction to Art Education (1)
FA 331 Practicum (Art) (12)
FA 326 Practicum: Seminar (3)

Additionally, the Art Department requires a minimum B- average in the following courses in order to attain institutional endorsement for certification:

1. Practicum: Art Education Seminar (3)
2. Practicum: Student Teaching (12)

Every effort will be made to provide a timely sequence of courses in order to fullfill graduation and teaching certification courses, but there may be instances where this is impossible.

If any questions arise concerning sequence, time of student teaching, etc., please contact the Program Coordinator, Art Education Certification.

The Interstate Certification Compact (I.C.C.) is a leagally based teacher certification reciprocity agreement among 32 states. Its value for students is that it provides reciprical certification in the member states. Membership in I.C.C. is often an aid in job acquisition in non-member states as well.

The following state are I.C.C. certified:

Alaska	Maryland	Rhode Island
California	Massachusetts	South Carolina
Connecticut	Minnesota	South Dakota
Delaware	Nebraska	Utah
Florida	New Hampshire	Vermont
Hawaii	New Jersey	Virginia
Idaho	New York	Washington
Indiana	North Carolina	West Virginia
Iowa	Ohio	Wisconsin
Kentucky	Oklahoma	Panama Canal Zone
Maine	Pennsylvania	

ART HISTORY COURSES

FA 106 ART SURVEY I (3) Major representative works of western art and architecture from prehistoric times through the middle ages will be presented from a critical and historical viewpoint. The student will be introduced to the aesthetic and philosophical principles that underlie a ll art as to the real relationship between the visual arts and the culture and society which them.

FA 107 ART SURVEY II (3) The study of western art and architecture from the Renaissance to the present will be presented under the same format as ART SURVEY I.

FA 316 HISTORY OF AMERICAN ART (3) A study of the painting, architecture and practical arts in the United States from the period after colonial times to the present.

FA 317 CLASSICAL ART (3) The chief artistic accomplishments of ancient Greece and Rome. Extensive study into the realm of Greek and Roman architecture, classical sculpture, building and portraiture, as well as the minor arts.

FA 318 FLEMISH ART (3) Study of Netherlandish painting of the 14th through 16th century works of art, from Jean Pucelle to Brueghel.

FA 319 RENAISSANCE ART (3) A study of the major artistic achievements of the Italian Renaissance from Giotto to Michaelangelo with special emphasis on painting and sculpture.

FA 321 CONTEMPORARY ARTISTS AND CONTEMPORARY ART (3) Students will be introduced to the works and ideas of modern contemporary American artists since 1950 with reference to the

influence of selected European modern artists. Museum trips are included.

FA 333 EARLY TWENTIETH CENTURY ART (3) A study of modern movements in painting and sculpture from 1900 to 1940 including Fauvism, Cubism, Futurism, and Surrealism.

FA 334 NINETEENTH CENTURY ART IN EUROPE (3) A study of European painting and sculpture from the Romantic-Classical styles of David and Delacroix through the Post-Impressionism of Paul Gauguin.

FA 338 EARLY CHRISTIAN AND BYZANTINE ART (3) A study of the sources and development of art of Christian West to 600 A.D. and of Byzantium to 1435. Attention will be given to the emergence of a Christian form of artistic expression and its connection with the heritage of late antique art, Byzantine architecture, its monumental mosaic and fresco decoration, manuscript illumination and icon painting.

FA 341 17th CENTURY ART (3) A study of formation and evolution of the Baroque movement in European architecture, sculpture and painting. Emphasis will be given to the individual styles and artistic ideas, as shown in works and writings of selected major artists of the 17th century.

FA 345 CRITICISM (3) Classical and contemporary theories of art with emphasis on concepts involved in the interpretation, evaluation and criticism of works of art. Prerequisite: FA 106 and 107 or equivalent.

FA 346 JAPANESE ART AND ARCHITECTURE (3) Japanese Art and Architecture, their Chinese sources and problems of evolution. Also, the social and cultural changes with the aesthetic output.

FA 347 NON-WESTERN TRADITIONS IN MODERN EUROPEAN AND AMERICAN ART (3) A study of selected problems including: The meaning of Japanese colour prints in the development of Impressionism and Post-impressionism; Modern Primitivism and its relation to the African sculpture and the art of primitive peoples; and the significance of Japanese traditional architectural concept for
Modern Japanese, European and American architecture. The emphasis will be placed on the new relation between form and space developed under the condition of the crisis of the traditional western three-dimensional system of representation.

STUDIO COURSES

FA 101 MATERIALS AND SAFEGUARDS IN ART (1) Is designed to outline the basic art media and materials used in studio art. Emphasis is placed on safeguards in utilizing art materials.

FA 102 PAINTING I (3) Introduction to oil painting with particular emphasis on gaining information about the material itself (color mixing, canvas preparation, preliminary drawing and general expressive potential of oil as a medium). Considerable study in picture organization, still life and figure composition.

FA 103 DRAWING I (3) Study of form and space with special attention to spatial proportional relationships.

FA 104 DESIGN FUNDAMENTALS (3) An investigation of the basic elements of art line, shape, color, texture, form, and space. These will be explained in theory as well as practice. The expressive possibilities of a variety of materials will be explored.

FA 105 THREE DIMENSIONAL DESIGN (3) The organization of three dimensional forms in a variety of media. Problems will include designing packages, toys, games, furniture, and a variety of other three-dimensional forms.

FA 201 PRINTMAKING I (3) The basic techniques in intaglio and relief printmaking will be explored. The intaglio procedures of line etching, aquatint, sugarlift and soft ground will be introduced. Collographs (a multimedia technique) and woodcuts (a relief printing process) will also be utilized. Students will create a series of prints in the various techniques and will develop an awareness of the visual and technical aspects of an original print.

FA 202 PAINTING II (3) Painting in oil and related media with concentration on furthering individual expression through interpretation of still life, figure and landscape. Problems in space, form and light are also studied. Prerequisite: Painting I.

FA 203 PAINTING III (3) Introduction to varied techniques such as paper, collage, assemblage and watercolor with individual subject matter selection appropriate to each

student. Prerequisite: Painting II.

FA 204 POTTERY I (3) An introduction to all phases of creative ceramics, ranging from handbuilt pottery to slab sculpture and mosaics. Emphasis will be on exploration of the many decorative, functional and aesthetic aspects of ceramics.

FA 205 SCULPTURE I (3) Provides an elementary consideration of sculpture through form and composition and includes studies in clay and plaster. There is some work from the human figure. Techniques include ar mature constructions, direct building in plaster, and casting into plaster and other materials.

FA 207 WATERCOLOR PAINTING I (3) The various techniques of watercolor painting will be demonstrated. Studio work will consist of painting with a variety of methods.

FA 209 COLOR THEORY AND PRACTICE (3) The study of interaction of color in theory and practice through experimentation with various color media.

FA 301 DRAWING II (3) Drawing with concern for skeletal and muscular structure, the play of light and shade on human form and stylistic techniques. Prerequisite: Drawing I

FA 302 WATERCOLOR PAINTING II (3) A continuance of Watercolor Painting I, with mixed media, including gouache. Prerequisite: Watercolor Painting I.

FA 303 PRINTMAKING II (3) A studio course which will further explore and develop the techniques of intaglio, relief, stencil and/or planographic printmaking. The emphasis will be on utilizing the various techniques introduced in Printmaking I and developing a deeper understanding of the visual and technical aspects of an original print. The use of color in the media of concentration will be explored. Prerequisite: Printmaking I.

FA 304 POTTERY II (3) A continuation of Ceramics I with emphasis on wheel thrown pottery and individual investigation and experimentation with glazes. Prerequisite: Pottery I.

FA 305 SCULPTURE II (3) Continuance of Sculpture I. Prerequisite: Sculpture I.

FA 306 PAINTING IV (3) Individual projects will be carried out under supervision and will result in an exhibit of selected works. Prerequisite: Painting III.

FA 307 ADVANCED PAINTING I (3) The student is assigned a particular studio area where he/she will be encouraged to develop, through paintings, his/her own interests and individuality. Discontinuance of regular class room instruction, replaced by periodic consultation and discussion. Prerequisite: Painting IV.

FA 308 ADVANCED PAINTING II (3) The same individualization found in Advanced Painting I, with the important addition of a required thesis, in which the student should fully define and elucidate his intentions and directions in the light of his painting. Prerequisite: Advanced Painting I.

FA 309 ADVANCED DRAWING (3) A course in Advanced Drawing will develop the student's own direction and personal expression. Prerequisite: Drawing II.

FA 310 WORKSHOP IN CRAFTS (3) An introduction to a number of crafts and an opportunity to pursue several crafts as chosen. Woodwork, weaving, ceramics, enameling, puppetry, casting, rug designing, fibers and fabrics, basic printing techniques and leatherwork are offered.

FA 311 EXPERIMENTAL IN MEDIA (3) A studio course which will explore media and techniques relating to the visual arts. The visual experience will deal with traditional media such as oils, acrylics, and collage as well as conceptual and experimental modes of expression such as lights, sound, film, video tapes and other contemporary art sources. Prerequisite: Design Fundamentals.

FA 312 INTAGLIO PRINTING (3) This course will explore intaglio techniques not employed in Printmaking I. Engraving, mezzotint, drypoint, photo-intaglio and ink viscosity printing will be some of the areas introduced. Involvement with the intaglio media as a mode of expression will be emphasized. Prerequisite: Printmaking I.

FA 313 LITHOGRAPHY (3) A studio course dealing with the planographic techniques of lithography. The various drawing materials us ed in this medium will include crayon, tusche, asphaltum, and the transfer method. The technical aspects of preparing, etching and printing the stone will be stressed. The visual and artistic understanding of an original print will also be emphasized. Color lithography will be introduced with various methods of registration. Prerequisite: Printmaking I.

FA 314 RELIEF PRINTING (3) A studio course offering various methods of relief printing. The techniques covered in this area will be line-cuts, woodcuts, cardboardcuts, wood engravings and gesso-cuts. The use of more than one color in a relief print will also be explored. The visual and artistic understanding of the above techniques will be emphasized. Prerequisite: Printmaking I.

FA 315 SERIGRAPHY (3) A studio course dealing with the stencil printing process of serigraphy (silk-screen). This course will cover the basic processes in serigraphy which are paper, tusche, glue, cut or profilm, and the photographic techniques. The visual and artistic understanding of a serigraph print will also be emphasized. Prerequisite: Printing I.

FA 330 ANATOMY FOR THE ARTIST (3) A study of human anatomy including the bone structure, muscles, and proportions. The course will utilize anatomy charts, the skeleton, and live models. Students of dance and drama, as well as students of the visual arts, will benefit from an in-depth study of human anatomy and from an understanding of the human body in movement.

FA 332 PHOTOGRAPHY FILM-MAKING WORKSHOP (3) A studio course exploring the visual experience of still and motion picture photography through a study of its basic aesthetic elements in composition, design and technique.

FA 348 PORTFOLIO PREPARATION (3) A culmination of the Graphic Design Concentration or the Fine Art Studio sequence. Emphasis on portfolio content and arrangement for job placement interviews or graduate school application. Assignment of supplementary art projects to augment portfolio presentation and/or slide reproduction of work. Resume design, preparation, and content also included. Prerequisites: permission of instructor; for senior art majors only.

GRAPHIC DESIGN COURSES

FA 206 LETTERING AND LAYOUT (3) Basic type and letter forms will be studied with an emphasis on mechanical lettering. Calligraphy as an expressive use of lettering will also be utilized. Basic layout techniques will be discussed and explored in conjunction with commercial advertising, posters, product labels, and brochures.

FA 210 TYPOGRAPHY (3) The communicative and aesthetic aspects of type faces will be explored. Procedures in type specifications for catalogues, books and commercial advertisements will be introduced. Assignments will involve using type as the primary element in design. Prerequisite: Lettering And Layout.

FA 211 VISUAL COMMUNICATION AND DESIGN (3) A survey of media used in visual communication and commercial advertising. Technical procedures of printing and/or production will be outlined and basic design fundamentals, typography and graphic production procedures will be introduced. Prerequisites: sophomore standing.

FA 328 GRAPHIC DESIGN I (3) A studio course with emphasis on the integration of design fundamentals into graphic communicative forms. Students will be involved in problem-solving experiences in various advertising media. Specific concentration will be on newspaper and magazine advertisements, brochures, television art forms and package designs. Prerequisite: Design Fundamentals, Lettering and Layout.

FA 329 ILLUSTRATION I (3) A studio course to introduce the many facets in the illustration field. Students will be involved in various problem solving experiences with concentration on the materials, techniques, and reproduction processes used in magazine, book, technical, and film illustration. The techniques of air brush and photography as illustrative media may also be explored. Prerequisite: Design Fundamentals.

FA 340 COMMERCIAL ART PRACTICUM (6) An eight week, full time, on-the-job work experience program in which the student is placed in an advertising agency or commercial art work setting. The student will be supervised by the agency director and the art practicum advisor. This practicum experience sequence will prepare the student for work procedures in the commercial art field and assist in later job placement.

FA 343 ILLUSTRATION II (3) A continuation of the study of techniques and application of illustration in the fields of advertising, book publication and technical journals. Portfolio quality work will be stressed. Prerequisite: Illustration I.

FA 344 GRAPHIC DESIGN II (3) A continuation of the study of graphic communicative forms used in the advertising media. Emphasis will be on analyzing assigned problems and choosing appropriate media for final visual presentation. Prerequisite: Graphic Design I.

ART EDUCATION COURSES

FA 322 ART EDUCATION CURRICULUM (3) Curriculum development at either the elementary or secondary level. It includes visits to area schools for the purpose of observations and art curriculum study.

FA 323 INTRODUCTION TO ART EDUCATION (1) A pre-practicum experience providing students with a working knowledge of the various levels within the public school structure. This experience will be translated into a choice of certification level.

FA 324 ART METHODS AND MATERIALS (3) The methods, principles and materials for Art Education. Areas included are stages of development, goals of Art Education, personal goals for teaching art, lesson planning and organization and newer media in Art Education. It includes a related pre-practicum experience.

FA 325 ART IN THE ELEMENTARY SCHOOL K-6 (3) Studio experience with materials related to the art experiences of children. The emphasis will be on giving the prospective teacher a better foundation in understanding and working with art materials and concepts.

FA 326 PRACTICUM: SEMINAR (ART EDUCATION) (3) The purpose of this course is to have students participating in the practicum (art teaching) share related student teaching problems and successes. Inter-relations between student teachers and pupils will be a prime focus.

FA 331 PRACTICUM (ART TEACHING) (6-12) Teaching experience within a setting appropriate for the art certification level chosen by the student.

FA 399 INDEPENDENT STUDY (6-12) In History, Studio and Education courses. (By arrangement only.)

BIOLOGY

Biology involves the collection and analysis of qualitative and quantitative data to understand living systems. These processes stress scientific reasoning using techniques such as problem solving, logical thinking and testing ideas against experience. The department offers a biology major with courses that range from cells to ecosystems. Options in medical technology and environmental issues are also available. Courses in the common core are Biology of Organisms, Inheritance and Development, and Environmental Biology. The Human Anatomy and Physiology course meets the requirements of the Physical Education Major. Department facilities available to students include eleven well-equipped laboratories, greenhouse, animal room, aquarium room, teaching collections of plants and animals, and an electron microscope. The forest setting of the college offers ample opportunities for field study. Biology majors may pursue specialized areas of interest through the independent studies and internship programs which may include on-campus as well as off-campus projects.

REQUIREMENTS FOR THE BIOLOGY MAJOR

The Biology Major is required to take a minimum of 40 credits within the Department, distributed as follows:

A. Introductory Courses 0-8 credits
Depending upon the background of the student he/she may take up to eight credits of introductory (100 level) courses during the freshman year from the following list:

BI 102 Environmental Biology
BI 104 Biology of Organisms
BI 106 Inheritance and Development

Please note BI 237 Human Anatomy and Physiology I, and BI 239 Human Anatomy and Physiology II are designed primarily for Physical Education majors and may NOT be taken for credit towards the Biology Major.

B. Intermediate and Advance Courses 30-38 credits

Intermediate courses (200 level) and advanced courses (300 level) have been placed into three levels of biological organization groupings. Each major must select a minimum of one course from one of the groups and a minimum of two courses from each of the other two groups. In addition, at least two 300 level courses must be included in the overall major program. A suitable 3-credit Independent Study may be substituted for one 300 level course only in exceptional cases.

The groupings are:

Cellular		
BI 203	Genetics I	(4)
BI 205	Cell Biology	(4)
BI 207	Embryology	(4)
BI 210	Histology I	(4)
PS 213	Biochemistry	(3)
BI 301	Plant Growth and Development	(4)
BI 318	Histology II	(4)
BI 322	Electron Microscopy	(4)
BI 326	Genetics II	(3)
Organismal		
BI 211	Botany of the Higher Plants	(4)
BI 213	Botany of the Lower Plants	(4)
BI 217	Invertebrate Zoology	(4)
BI 221	Vertebrate Physiology	(4)
BI 223	Microbiology	(4)
BI 227	Comparative Vertebrate Anatomy	(4)
BI 230	Evolution	(3)
BI 231	Plant Physiology	(4)
BI 235	Ornithology	(4)
BI 241	Parasitology	(4)
BI 242	Immunology	(4)
BI 303	Medical Microbiology	(4)
BI 312	Mammalogy	(4)

Environmental

BI 201	General Ecology	(3)
BI 202	Conservation	(3)
BI 208	Marine Biology	(4)
BI 215	Economic Botany	(4)
BI 219	Aquatic Biology	(4)
BI 233	Environmental Legislation	(3)
BI 250	Populations, Food, and Nutrition	(3)
BI 304	Environmental Microbiology	(4)
BI 305	Field Ecology	(4)
BI 316	Urban Ecology	(4)

C. Seminars 2 credits

A total of two of these one-credit offerings are necessary. They are usually taken in the junior or senior year from the several offered each semester. These courses are numbered in the BI 280 to 289 sequence.

BIOLOGY MINOR

The student minoring in biology is required to take 18 credits in Biology, no more than eight of which can be introductory courses (100 level).

ADVISING

Biology faculty welcome the opportunity to talk to incoming students about the program. Students who decide to major in biology will be assigned a faculty advisor in the Department who can provide guidance concerning the major and related work in mathematics, chemistry, physics, secondary education and other areas of interest. Consultation at an early date will provide the possibility of taking courses which can lead toward a variety of career options.

COURSES

Waiver of prerequisites: A student with a strong background may consult with the instructor to request the waiver of any prerequisite for a specific course.

BI 100 LIVING NATURAL HISTORY OF MASSACHUSETTS (2) A discussion of the living natural resources of Massachusetts. The three major topics to be considered will be: forests and forestry practices, wildlife and its management, and marine and freshwater resources. Present and past interactions of human populations with these resources will be stressed throughout the course. Designed as an elective for the non-biology major.

BI 101 SCIENCE FOR THE ELEMENTARY SCHOOL (3) Designed to prepare future teachers to utilize the student-oriented inquiry approach in teaching elementary school science. Emphasis will be placed upon hands-on experiences for accomplishing this through biological, physical, and earth science activities. Course is taught by a professor from the Biology Department and one from the Physical Science Department.

BI 102 ENVIRONMENTAL BIOLOGY (4) An introduction to selected ecological principles, and man's interrelations with, and effects upon, the environment.

BI 104 BIOLOGY OF ORGANISMS (4) Consideration of the means by which representative plants and animals, including the human, solve problems associated with the maintenance of the individual. Problems include gathering and digestion of food, gas exchange, circulation and regulation of the internal environment, reproduction, hormonal and nervous control, movement, and behavior.

BI 106 INHERITANCE AND DEVELOPMENT (4) Introduction to the study of energy transformations, cellular reproduction, inheritance and the gene, and the development of plants and animals.

BI 201 GENERAL ECOLOGY (3) Denotes and studies physical and biological interactions and principles involved in functioning ecosystems. Includes measurement of local environmental factors and interpretation of these data. The roles of energy, raw materials, plants and animals in successional community development are stressed. Involves field experiences.

BI 202 CONSERVATION (3) Emphasizes the scientific bases for solving current environmental management problems of energy, soil, land, solid wastes, water, air, and wildlife and integrates with sociological, historical, economic,geographic, and political aspects. Each student gathers information and suggests solutions to a local environmental problem of his choice.

BI 203 GENETICS I (4) Emphasizes the Mendelian mechanisms of inheritance, sex inheritance, human heredity, chromosome mapping, and population genetics. Also included are methods for determining genetic probabilities and the analysis of statistical data. Discussions correlate current genetic research with the above, particularly as it relates to prenatal diagnosis of genetic abnormalities and the concept of eugenics in controlling gene frequencies. Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.

BI 205 CELL BIOLOGY (4) A study of the structure, function, and life history of cells and their components. Consideration of relationships among cell organelles and between cells and their environments. Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.

BI 207 EMBRYOLOGY (4) A study of vertebrate embryo development, including developmental patterns and the emergence of form and function as an expression of genetic endowment. Special attention is paid to the avian and mammalian morphogenesis. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 208 MARINE BIOLOGY (4) An in-depth investigation of the various marine ecosystems such as sand, mud, and rock intertidal areas, salt marshes, estuaries, coral reefs, and mangrove forests; also the neritic, pelagic, and enthic regions of the open ocean. Includes the numerous interactions between biotic and abiotic factors present. Adaptations of life forms for survival in these environments will be discussed. Also includes laboratory exercises, including establishing, maintaining and analyzing a salt water aquarium, plus field trips to the coast. Prerequisite: one semester of BI 102, BI 104, or BI 106.

BI 210 HISTOLOGY I (4) Study of the microscopic structure and function of animal tissues with emphasis upon the mammal. An introduction to the basic principles of microtechnique. Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.

BI 211 BOTANY OF THE HIGHER PLANTS (4) Describes the course of the evolution of the vascular plants as deduced from their comparative morphology. Emphasis is placed on the adaptive mechanisms which have allowed these plants to spread and diversify on land, and their subsequent importance to man. Laboratory emphasis on plant anatomy, propagation, nutrient and tissue culture, and plant classification. Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.

BI 213 BOTANY OF THE LOWER PLANTS (4) Explores the morphology, evolution, and functional activities of the non-seed plants, with emphasis on the Fungi and Algae. Material includes life cycles, and the ecology of these groups as they relate to their roles in maintaining the cyclical relationships between the living and non-living worlds: i.e., food chains, decay, sewage disposal, pollution. Laboratory work includes field trips whenever practical and the collection and examination of living material. Prerequisite: Two of BI 102, BI 104, or BI 106 or one semester and permission of instructor.

BI 215 ECONOMIC BOTANY (4) Plants in relation to human welfare. Students will examine how, since the dawn of civilization, man has associated himself with plants as sources of food, fiber, forage, as well as medicines. Special emphasis will be placed on the intrinsic overlap between ecology and economy in today's world. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 216 FLORA OF MASSACHUSETTS (3) An introduction to the vascular flora of Massachusetts. Topics will included a taxonomic survey of major families, the use of keys to identify specimens, and the dissection of preserved floral material. The early spring flora will be observed in the field and herbarium specimens will be extensively utilized throughout the course.

BI 217 INVERTEBRATE ZOOLOGY (4) Study of representative groups of invertebrates, including the phylogenetic relationships and the morphology, physiology and natural histories of selected individual animals. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 219 AQUATIC BIOLOGY (4) Survey covering the biological, chemical, and physical considerations of inland waters with emphasis on the environmental relationships, identification, and natural history of indigenous aquatic organisms. Considerable work is done in the field. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 221 VERTEBRATE PHYSIOLOGY (4) Recognition and interpretation of the integration of function in the organ systems of the vertebrate animal in relation to environmental influences. Prerequisite: Two semesters of BI 102, BI 104, or BI 106; two semesters of General Chemistry.

BI 223 MICROBIOLOGY (4) An introductory study of the microorganisms with emphasis on Bacteriology. Consideration of clinical and environmental aspects, principles of structure, metabolism, and genetics of procaryotes. Laboratory includes basic techniques for study, enumerations and identification of bacteria. Prerequisite: Two semesters of BI 102, BI 104, or BI 106 or one semester and permission of instructor.

BI 227 COMPARATIVE VERTEBRATE ANATOMY (4) A study of the anatomy and phylogeny of the vertebrates. Lecture topics will include gross anatomy and consideration of evolutionary trends among the vertebrates. Laboratory work will consist primarily of the dissection of representative species. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 230 EVOLUTION (3) A discussion of theories of evolution, evidence for evolution, genetic variability and changes in populations, and evolutionary Patterns of the past. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 231 PLANT PHYSIOLOGY (4) Deals with fundamental physiological processes vital to plant life. Topics such as water regulation, photosynthesis, respiration, and development will comprise the bulk of the course-content. Special emphasis will be placed on various experimental methods that include use of research equipment and statistical analysis. Each student may be assigned an independent research project at the beginning of the semester. Prerequisite: Two of BI 102, BI 104, or BI 106 and one semester of General Chemistry.

BI 233 ENVIRONMENTAL LEGISLATION (3) A detailed examination of the need for, and biological basis for, the standards established by existing, or proposed, federal and state legislation. The lectures, which will deal with topics such as the National Environment Policy Act and the Water Pollution Control Act, will be supplemented by analysis and discussion of environmental impact statements and court decisions dealing with each of the topics covered. Prerequisite: One semester of introductory biology and at least one of the following: BI 201 or BI 202 or permission of instructor.

BI 235 ORNITHOLOGY (4) An intermediate course focusing on the evolution, ecology and distribution, life history and economic importance of the class Aves. Laboratories will emphasize field experience for the identification of local and migratory species, and the study of the anatomy and physiology of birds. Grades will be based upon lectures and laboratory exams. Prerequisite: One semester of biology or permission of instructor.

BI 237 HUMAN ANATOMY AND PHYSIOLOGY I (3) Utilizes a general approach to the human body with emphasis on structure and function to show ways in which various organ systems interact. The integumentary, skeletal, muscular, and nervous systems and sense organs are studied. [Note course is not for credit toward the biology major]. Prerequisite: One of the following: Introduction to Chemistry, Introduction to Physics, General Chemistry, or Physics I. It is also recommended that a student take BI 104.

BI 239 HUMAN ANATOMY AND PHYSIOLOGY II (3) Utilizes a general approach to the human body with emphasis on structure and function to show ways in which the various organ systems interact. The respiratory, circulatory, digestive, endocrine, and urinary systems as well as temperature regulation and fluid balance are studied. Course is not for credit toward the biology major. Prerequisite: BI 237.

BI 241 PARASITOLOGY (4) A study of representative groups of animal parasites including parasite host interactions, life histories, and medical implications.

BI 242 IMMUNOLOGY (4) Explores the nature of antigens and the immunological response. The immune response will be considered in relation to infectious disease, transplantations, allergies, and cancer. The laboratory includes basic serological techniques as well as some of the more sophisticated research techniques for separation of serum proteins.

BI 250 POPULATION, FOOD, AND NUTRITION (3) A comprehensive examination of the interconnection between human ecology and the uniquely human predicaments such as population crisis, world hunger, and poverty.

BI 280 - 289 BIOLOGY SEMINAR (1) Topics will vary depending on availability of staff and student interest. Primarily for juniors and seniors. Prerequisite: Permission of instructor.

BI 290 TEACHING SECONDARY SCHOOL BIOLOGY (3) Designed to introduce the necessary skills and techniques for teaching biology in grades 9 - 12. Emphasis will be placed on the use of inquiry and those curricula developed with this approach. Topics discussed will include conditions for good biology teaching, biological goals and objectives, motivational and evaluative techniques, questioning strategies, safety in the biology laboratory, use of live organisms, choosing biology computer software, professional organizations for biology teachers and their publications. [NOTE not accepted as credit towards the biology major.] Prerequisites: completion of 30 hours of the biology courses

needed for certification plus ED 356.

BI 301 PLANT GROWTH AND DEVELOPMENT (4) Project-oriented. Specific studies dealing with the physiology of germination, dormancy, growth-retardation, hormonal actions, tissue culture, and propagation will be taken up with corresponding short-term projects. Special consideration will be given to the effects of environmental pollution on plant growth. Prerequisite: Two biology courses at the intermediate (200) level, one of which must be BI 211 or BI 231.

BI 303 MEDICAL MICROBIOLOGY (4) A study of medically important microorganisms, including bacteria, fungi, viruses, and protozoa. The course attempts to correlate the mechanisms of pathogenicity and virulence with disease. Prerequisite: BI 223

BI 304 ENVIRONMENTAL MICROBIOLOGY (4) A study of the interrelationship of microorganisms with the environment. Consideration of the role of microorganisms in pollution and pollution abatement, industrial processes, agriculture, and ecology. Prerequisite: BI 223 or permission of instructor.

BI 305 FIELD ECOLOGY (4) An advanced course in ecology with strong emphasis on field studies and related laboratory work. Topics will include techniques in observation, collection, and identification of organisms, and the physical and biological description of natural area. Field trips required. Prerequisite: One semester of BI 102, BI 104, or BI 106.

BI 312 MAMMALOGY (4) The identification, classification, evolution, ecology, and physiology of mammals with emphasis on New England forms. Laboratory work will include an introduction to the common techniques used in mammalogy, experimentation, and identification of the skins and skulls of the local fauna. Prerequisite: Two zoology courses at the intermediate (200) level, one of which must be BI 227, BI 221, or BI 230.

BI 313 IMMUNOLOGY (4) Explores the nature of antigens and the immunological response. The immune response will be considered in relation to infectious disease, transplantations, allergies, and cancer. The laboratory includes basic serological techniques for separation of serum proteins. Prerequisite: 12 hourse of intermediate-level Biology.

BI 316 URBAN ECOLOGY (4) An examination of the interactions of humans and their structures (buildings, roads, etc.) and activities with the natural environment in an urban setting. Lecture topics will include urban climates, air pollution, and water supply and disposal. Laboratories will emphasize field experience. Prerequisite: One semester of BI 102, BI 104, BI 106, or BI 201.

BI 318 HISTOLOGY II (4) Study of the microscopic structure and function of organs with emphasis upon the vertebrates. Laboratory experience will include histological, histochemical, and other appropriate techniques. Reading and discussion of selected papers from scientific journals. Prerequisite: BI 210, two semesters of General Chemistry.

BI 322 ELECTRON MICROSCOPY (4) Consideration of research frontiers in biological fine structure will include practice in the basic techniques of the transmission electron microscope and will focus on analysis of the capabilities and limitations of the instrument. Prerequisite: BI 205 or BI 210.

BI 326 GENETICS II (3) Includes the chemistry of DNA, RNA, and amino acids, regulation of protein and antibody synthesis, the genetic code, the concept of template surfaces, the operon theory and embryology at the molecular level. Builds upon and expands the understanding of Mendelian genetics and emphasizes bacterial and viral genetic research. Prerequisite: BI 203.

BI 388 BIOLOGY INTERNSHIP (1-12) A vocational experience in the area of the student's biological interest. Course is designed to provide a hands-on contact involving a variety of responsibilities and skills related to the student's specific concentration. Prerequisite: departmental permission.

BI 389 TOPICS IN ENVIRONMENTAL STUDIES (1-3) A field-oriented investigation of one or more ecological communities not found in Massachusetts. The identification and ecology of the plants and animals of the community will be emphasized and the course will include lectures and/or readings in addition to an extended field trip within the community.

BI 399 INDEPENDENT STUDIES (1-3 credits per semester) Directed study in biology with the student conducting a library, field, or laboratory research project under supervision of an instructor. A total of six credits may be applied toward the undergraduate degree. Prerequisite: Permission of instructor.

COMPUTER AND INFORMATION SCIENCE

The department of Computer and Information Science offers two major programs to meet the needs and interests of students - Computer Science and Computer Information Systems.

Computer Science, an interdisciplinary subject, emphasizes the construct and function of the modern digital computer and the use of the computer for information processing. At Westfield State College strong relationships exist between the Department of Computer and Information Science and other departments such as Mathematics, Criminal Justice, Economics and Business Management, Geography and Regional Planning, Psychology, and Physical Science. These relationships have resulted in the creation of courses such as Computer Security and Computer Mapping.

Computer Information Systems is designed to prepare graduates for careers as entry-level commercial programmers, programmer/analysts, systems analysts, and related job titles. The major also prepares graduates for further study in the areas of Business, Data Processing, and Information Systems. The aim of the major is to provide the student with computer and information management skills which can be applied to problems in diverse applications areas.

The computer hardware and software available at Westfield State College is unparalleled for a college its size in the United States. Major hardware includes 2 Control Data Corporation Cyber 172 mainframes, a Control Data Corporation Cyber 18 minicomputer, a Wang VS/80, and numerous microcomputers (DEC RT 11's, DEC Rainbow 100's, IBM, microVAXs, Leading Edge, Apples, Commodores, etc.). The software is extensive and includes BASIC, FORTRAN, PASCAL, COBOL, PL/1, and RPG compilers. Languages such as LISP, PROLOG, and SNOBOL 4 are also supported. Available assembly languages include VAX Assembler, Macro-11, Wang Assembler, MIX, IBM's BAL, and COMPASS. As a member of the Massachusetts State College Computer Network, the College has available an extensive collection of library packages (statistics, CAI, etc.). The 70++ academic computer terminals are distributed at various locations on campus,including residence halls.

REQUIREMENTS FOR THE COMPUTER SCIENCE MAJOR

CS 102	Computers in the Modern World	(3)
CS 120	Computer Science I (PASCAL)	(3)
CS 121	Computer Science II (PASCAL)	(3)
CS 206	Assembly Language Programming	(3)
CS 320	Data Structures and Algorithm Analysis	(3)
CS 330	Computer Architecture	(3)
CS 339	Operating Systems	(3)
CS 302	Computer Science Seminar: one (1) seminar and one (1) approved upper-level CS three credit elective	(4)
MA 105	Calculus I	(3)
MA 106	Calculus II	(3)
MA 118	Linear Algebra	(3)
MA 220	Discrete Structures	(3)

Plus any two of the following 3-credit courses

MA 201	Calculus III	(3)
MA 305	Probability Theory	(3)
MA 311	Theory of Numbers	(3)
MA 333	Applied Statistics and Experimental Design	(3)
MA 334	Operations Research	(3)
MA 335	Introduction to Numerical Methods	(3)
MA 338	Statistical Theory	(3)

REQUIREMENTS FOR THE COMPUTER INFORMATION SYSTEMS MAJOR

The CIS major includes both a business component and a computer studies component. A total of fifty-one (51) credits are required. Twenty-four (24) of these credits are business related, six (6) are social science, and the remaining twenty-one (21) are computer related courses.

BUSINESS COMPONENT

MG 104	Principles of Accounting I	(3)
MG 105	Principles of Accounting II	(3)
MG 207	Financial Management	(3)
MG 221	Introduction to Business Management	(3)
MG 231	Marketing Management	(3)
MG 250	Quantitative Approaches for Business Decisions	(3)

MG 308	Organizational Development and Behavior	(3)
MG 330	Production/Operations Management	(3)

SOCIAL SCIENCE COMPONENT

EC 101	Principles of Macroeconomics	(3)
EC 102	Principles of Microeconomics	(3)

COMPUTER COMPONENT

CS 205	COBOL I	(3)
CS 208	COBOL II	(3)
CS 310	Database Management	(3)
CS 346	Systems Analysis and Design	(3)
CS 353	Applied Development Project	(3)
any two	CIS Electives	(6)

COURSES

CS 101 COMPUTERS IN SOCIETY (3) Offers an elementary conceptual introduction to the nature and function of computers, but the main emphasis of the course will be on the impact of the use of computers in such areas as national security, societal services, automation, transportation, communication, education, personal privacy, employment, and biological sciences.

CS 102 COMPUTER SCIENCE IN THE MODERN WORLD (3) Provides an overview of computer science. The student is introduced to computer systems, software design, and computer architecture. The intellectual, social, legal, and human issues involved in the use of computers in modern society are examined. The course is to be taken concurrently with Computer Science II and is for majors only. Prerequisites: High school mathematics through trigonometry or MA 104.

CS 117 INTRODUCTION TO COMPUTER PROGRAMMING (BASIC) (3) An introduction to basic concepts and techniques of computer programming for the student not majoring in mathematics or computer science. Topics to be studied include programming in BASIC, the solution of a variety of problems with the computer, and applications of computer programming and modeling to non-mathematical fields.

CS 118 APPLICATIONS PROGRAMMING (FORTRAN) (3) An introduction to FORTRAN designed for students not majoring in mathematics or computer science. Applications will be drawn from a variety of primarily non-mathematical subjects. Some standard library programs will be considered. Several programming projects will be assigned.

CS 120 COMPUTER SCIENCE I (3) A theoretical introduction to computer science designed for majors and minors. Elements of the PASCAL language are included. Emphasis is placed upon structured programming techniques and common algorithms. Extensive programming experience is obtained employing various host computer systems.

CS 121 COMPUTER SCIENCE II (3) A continuation of CS120. Fundamentals of data structures are introduced. Emphasis is placed upon file manipulation and data base structuring concepts. PASCAL is the host language and various host computer systems are employed. Several complex programming projects are assigned. Prerequisite: CS120.

CS 125 PRINCIPLES OF BUSINESS DATA PROCESSING (3) Provides an introduction to computer systems and data processing concepts, with special emphasis on the applications of computers in business organizations. Includes an overview of data processing concepts, computer hardware, software, and programming languages; an introduction to computer systems configuration to include operating systems and data communications; an introduction to systems analysis and design; and a comparison of computer based processing, management information, and decision support systems. A hands-on component will introduce the student to the college's computer system.

CS 200 CS 205 PROGRAMMING MINI-COURSES (1) Several one-credit courses have been developed to expose the student to selected software. Modules exist in the following areas. LISP, SNOBOL4, GPSS, APL, and PL/1. Several programming assignments are associated with each module. Prerequisite: Knowledge of at least one high-level programming language.

CS 205 COBOL I (3) Provides an introduction to the COBOL language and covers the most important features of the Identification, Environment, Data, and Procedure Divisions of a COBOL program. Extensive programming experience is obtained via business-related computer applications. Table handling and sorting will be included in CS205. Prerequisite: One previous programming course.

CS 206 ASSEMBLY LANGUAGE PROGRAMMING (3) An in-depth study of the internal instructions, organization, and operations of the modern digital computer. The host computer will vary from semester to semester as will the assembly language for this course. A second computer system may also be explored at the assembly language level. Prerequisite: Knowledge of a high level programming language.

CS 208 COBOL II (3) A continuation of CS205. Emphasis is placed on master file updating, methods of file organization, and report writer features. Numerous business-related programming assignments of an advanced nature are performed. Prerequisite: CS205.

CS 211 RPG PROGRAMMING (3) This 3 credit course provides hands-on introduction to programming in a current version of the RPG language. Emphasis is on the application of RPG to real-world problems. Most of the features available in RPG will be covered during the course, including the fixed logic cycle of RPG. The host system will be our Wang VS/80. The complete programming process from problem identification through program design, coding, testing, implementation, and documentation will be experienced. A comparison between RPG and other higher-level languages will be made, and the role of RPG in the library of languages will be emphasized.

CS 261 COMPUTER APPLICATIONS WITHIN A CRIMINAL JUSTICE ENVIRONMENT (3) This course will use BASIC as the host language and will serve to expose the student to some aspects of COBOL (to be developed during the course). Emphasis will be placed upon creation and maintenance of criminal justice data bases, fingerprint identification via computer, and suspect composite drawings via computer. Prerequisite: CS117.

CS 290 COMPUTER SECURITY (3) The security of computer systems will be examined from three perspectives: risk identification, risk evaluation, and risk control. Risk identification will be explored in terms of the "onion skin" approach, methods of risk identification, and computer related fraud. Risk valuation will involve an exploration of probability and impact and approaches to risk evaluation; risk control will focus on such issues as strategy, cost-effectiveness, and contingency planning. Prerequisite: CS117 and CJ207 and MG104 or equivalent.

CS 302 COMPUTER SCIENCE SEMINAR (1) Focuses on current topics in computer science and allied fields. By means of individual presentations, group, or panel discussions, a variety of aspects and issues of this discipline will be explored. This course can be repeated for credit (up to a maximum of four credits). Prerequisite: Sophomore standing and permission of instructor.

CS 304 C/UNIX SYSTEMS PROGRAMMING (3) C/UNIX Systems programming language is taught in a UNIX environment. The programming tools of UNIX itself, along with C, are used in a small systems programming project.

CS 320 DATA STRUCTURES AND ALGORITHM ANALYSIS (3) A one semester course which applies analysis and design techniques to fundamental algorithms which act on data structures. Provides a sound theoretical basis for applications to data base management systems, operating systems, and compiler construction. Topics to be covered include basic concepts of data, sequential file structure, linear lists and strings, arrays and orthogonal lists, tree structures, searching and sorting techniques, and recursive algorithms. Prerequisite: CS 121.

CS 330 COMPUTER ARCHITECTURE (3) Computer architecture involves several concepts including computer system organization, addressing techniques, memory allocation, and input/output structures. Topics include digital logic, combinatorial synthesis, and analysis and the use of several of the most common sequential circuits. Some simulations of networks and architectures will be developed. Prerequisites: CS 121, CS 206, PS 137.

CS 339 OPERATING SYSTEMS (3) An operating system is an organized collection of programs that act as an interface between machine hardware and users. Topics to be discussed include I/O programming, memory management, processor management, and file systems. Prerequisite: CS 320 and CS 330.

CS 340 CYBERNETICS (3) Cybernetics can be described as the interface of brains (human & animal), computers, and machines. This course explores the topic from two perspectives, brain theory (BT) and artificial intelligence (AI). Topics such as the human brain, neurology, neurotransmitters, brain modeling via computer, and search paradigms are examined. Prerequisites: Knowledge of at least one high level programming language and an interest in biology or psychology.

CS 346 SYSTEMS ANALYSIS AND DESIGN (3) This 3 credit course provides an overview of the Systems Development Life Cycle. In addition, the most popular tools and methodologies for system analysis, documentation, design, and development are examined and applied. Through the use of individual projects and exercises or preferably a semester-long case study,

students will do major portions of the analysis and design of an information system of moderate complexity. Students will become familiar with traditional approaches to analysis and design as well as at least one of the popular structural methodologies in current use. Prerequisites: MG 221 and familiarity with a high level language.

CS 347 TELECOMMUNICATIONS (3) A course dealing with the telecommunications industry and with computer networks and how they operate. Students will be taught the specifics of communications hardware such as modems and multiplexers. The ISO OSI model will be reviewed and communications protocols will be covered in some detail. Local Area Networks and Wide Area Networks will also be covered. Students are expected to have had one programming language and Calculus I or its equivalency.

CS 350 ARTIFICIAL INTELLIGENCE (3) A survey of artificial intelligence, including Al languages, applications of data structures, interaction with the external environment, and expert systems. Prerequisite: CS 320.

CS 351 INTRODUCTION TO THE THEORY OF COMPUTATION (3) Presentation of topics of current theoretical interest in computer science chosen from among context-free languages and grammars; finite automata, Turing machines, cellular automata and other models of computers; computability theory; and computational complexity. Prerequisite: MA 220 or equivalent, and CS 121.

CS 353 APPLIED DEVELOPMENT PROJECT (3) This 3 credit course is a practicum in systems development, utilizing real projects or detailed cases. A team approach is used to analyze, design, document, and develop realistic computer-based information systems. Students are required to apply concepts, principles, problem-solving strategies, techniques, and tools learned in previous computer science and business courses to the case problems.

CS 396 COMPUTER SCIENCE INTERNSHIP A (3) An on-campus internship experience for computer science and computer information systems majors. This experience will involve 8-10 hours/week. Prerequisite: Permission of the instructor.

CS 397 COMPUTER SCIENCE INTERNSHIP B (3) An internship experience which may be on or off campus depending on availability. Students might participate in a major system design project on-campus or might be interning at a business location in the Greater Springfield Area. Prerequisite: Permission of the instructor.

ASSOCIATED COURSES

DEPARTMENT OF CRIMINAL JUSTICE
- CJ 200 ECONOMIC CRIME
- CJ 207 ISSUES IN CONTEMPORARY SECURITY
- CJ 305 PRINCIPLES OF EVIDENCE AND PROOF

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING
- GP 210 COMPUTER MAPPING
- GP 212 STATISTICAL PACKAGES FOR SOCIAL SCIENTISTS (SPSS)

DEPARTMENT OF MATHEMATICS
- All MA-labeled courses

DEPARTMENT OF PHYSICAL SCIENCE
- PS 137 INTRODUCTION TO DIGITAL ELECTRONICS
- PS 301 MICROPROCESSORS/HARDWARE AND SOFTWARE

CRIMINAL JUSTICE

The goal of the Criminal Justice program is to develop among present and future employees of the criminal justice system an increased awareness of the role of law enforcement, courts, and corrections, and a better understanding of the socio-political and economic forces which influence that system.

The course of study consists of both an extensive overview of the criminal justice system and an intensive examination of each of the major components of the system. The program is designed to serve both those students who may elect to enter the criminal justice profession immediately upon graduation and those students who desire to pursue graduate work. Criminal Justice majors are able to apply for an internship and work in a criminal justice related agency or organization during their senior year.

REQUIREMENTS FOR CRIMINAL JUSTICE MAJORS

The Criminal Justice major consists of 39 credits. All students must take at least 21 Criminal Justice credit-hours at Westfield State College. There are five required courses in the major. They are:

CJ 101 INTRODUCTION TO CRIMINAL JUSTICE	(3)
CJ 201 LAW ENFORCEMENT AND SOCIETY	(3)
CJ 202 INTRODUCTION TO CORRECTIONS	(3)
CJ 205 AMERICAN JUDICIAL SYSTEM	(3)
CJ 331 RESEARCH METHODS	(3)

Each of these courses is three credit-hours. Students choose electives in the major in order to complete the remaining 24 credit-hours.

COURSES

CJ 101 INTRODUCTION TO CRIMINAL JUSTICE (3) A survey of the American Criminal Justice System as a socio-political institution. The police, criminal courts, correctional and rehabilitative endeavors will be analyzed within the framework of empirical research development and perspectives of the social sciences. Required of all Freshmen in the Criminal Justice major.

CJ 201 LAW ENFORCEMENT AND SOCIETY (3) The structure and function of law enforcement agencies in contemporary society will be analyzed in their sociological context. Particular emphasis will be placed on the role of the police within the framework of the Criminal Justice System. Prerequisite: CJ 101 or its equivalent.

CJ 202 INTRODUCTION TO CORRECTIONS (3) An in-depth examination of the American Correctional System. Traditional punitive measures will be analyzed in relation to current reintegration alternatives. Prerequisite: CJ 101 or its equivalent.

CJ 203 CRIMINAL LAW (3) The function of criminal law and its relationship to various criminal offenses, including crimes against persons and crimes against property. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 204 PRINCIPLES OF CRIMINAL INVESTIGATION (3) The science of investigation of crimes, laboratory techniques, interpretation of data, and elements of specific crimes. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 205 AMERICAN JUDICIAL SYSTEM (3) An examination of the development of law and the American legal system. The problems related to the meaning and uses of law; the organizational hierarchy of the courts; and the role of the courts in the criminal justice system. Prerequisite: CJ 101 or its equivalent.

CJ 206 CRIME IN THE CITY (3) An examination of the distribution and crime patterns within an urban area. Particular emphasis will be placed on theoretical and environmental causes of urban crime. Additionally, this course will attempt to focus on urban policies that address the problems of crime in the city. Analysis of victim-precipitated crime, concentric zone theory, and urban migration, will be among the issues considered. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 207 ISSUES IN CONTEMPORARY SECURITY (3) An overview of security systems applicable to contemporary industrial and commercial demands. Losses through physical, technological and personnel hazards are viewed as preventable phenomena if vulnerabilities are recognized and ameliorative measures taken. Counter-measures will be weighed within the framework of loss criticality and cost of effectiveness. Prerequisite: CJ 101 or its equivalent.

CJ 301 JUVENILE PROCEDURE (3) An examination of the underlying philosophy of juvenile justice and procedures used to process a juvenile alleged to be delinquent through the juvenile justice system; will focus on the differences between juvenile procedure and adult criminal procedure by examining recent court decisions and statutory law pertaining to juveniles. Prerequisite: CJ 101, 201, 205, 202 or their equivalent.

CJ 303 PATTERNS OF CRIMINALITY (3) The U.S. Department of Justice Index Crimes will be studied along with other crimes, which will be selected on the basis of their contemporary administrative significance and their effect on the criminal justice system in particular. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 304 PREVENTION AND CONTROL (3) An in-depth examination of the criminal justice system and the efforts it has exerted in an attempt to prevent and control criminal behavior. Course will focus on the traditional methods including probation and parole as well as recent trends in crime control and prevention: the utilization of community based treatment programs and attempts by many criminal justice agencies to avoid the processing of individuals through the system. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 305 PRINCIPLES OF EVIDENCE AND PROOF (3) The study of the different types of evidence, relevance, the hear-say rule and its exceptions, impeachment and cross-examination and privileged communications. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 306 CONTEMPORARY PROBLEMS IN CORRECTIONS (3) An intensive analysis of selected problems in institutional and community corrections. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 307 CONTEMPORARY PROBLEMS IN LAW ENFORCEMENT (3) An intensive analysis of selected problems in American law enforcement and police-community relations. A major research paper is required. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 308 RIGHTS OF THE CONVICTED (3) An examination of the legal rights of the individual who has been convicted of a crime. This lecture course will focus specifically on both federal and state laws and court decisions dealing with the legal rights of probationers, confined prisoners, and parolees in the American criminal justice system. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 310 ORGANIZED AND WHITE COLLAR CRIME (3) The methods through which organized crime influences and, in many instances, controls entire communities. Traditional types of crime heavily influenced by organized crime, such as loan sharking and gambling, will be analyzed in an effort to demonstrate the basis of power and wealth of organized crime in the United States. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 311 VICTIMOLOGY (3) Criminal-victim relationships, with emphasis on victim-precipitated crimes and compensation to the victims. Consideration is given to: concept and significance of victimology; time, space, sex, age, and occupational factors in criminal-victim relationships; victims of murder, rape, other violent crimes and property crimes; victim typology; the public as victim; restitution and compensation to victims. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 312 WOMEN AND THE LAW (3) An examination of the female and her involvement with the legal processes in the United States. Attention will be focused on the female as the offender and as the victim. Analysis of the various theoretical approaches to understanding the female offender will be presented in addition to an exploration of the recent literature on the female and the criminal justice system. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 313 QUANTITATIVE METHODS IN CRIMINAL JUSTICE (3) Examines the relationship and application of statistical techniques to theory building and concept construction. Gives an overview of statistical methods and their appropriateness for research in criminal justice. In addition, various computer-oriented analytical tools and data processing systems available to the criminal justice practitioner will be surveyed. Prerequisite: CJ 331 or its equivalent.

CJ 314 SEMINAR ON OFFENDER REHABILITATION (3) The "nothing works" doctrine generated by the controversial Martinson Report has resulted in considerable confusion regarding the effectiveness of corrections programs designed to elicit specific behavioral changes on the part of the correctional client. This course will thoroughly examine the debate surrounding the "nothing works" doctrine and present those methods of rehabilitation that have proven effective in the treatment of offenders. Probation, parole and programs for the incarcerated offender will be the primary focus of this course. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 315 STRESS AND THE CRIMINAL JUSTICE SYSTEM (3) An intensive examination of the interpersonal stresses indigenous to Criminal Justice practitioners. Stress management within Criminal Justice organizations will be considered in terms of the administrative and functional problems encountered. Special attention will be given to the criminal justice environment which deals with social service and control on a twenty-four hour basis. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 316 CIVIL LIABILITIES OF CRIMINAL JUSTICE PROFESSIONALS (3) The civil liability for harm inflicted on another. Topics to be considered will include: intentional torts such as assault, battery, and false imprisonment; negligence; torts of strict liability; libel, slander and defamation; liability of owners and occupiers of land; and the liability of state and federal employees for harm caused in their respective professional capacities. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 317 EVOLUTION OF AMERICAN LAW ENFORCEMENT (3) A critical analysis of the contemporary American law enforcement establishment in relation to the evolutionary forces that have contributed to its development. Excepting modern technology, the law enforcement function tends to run in predictable cycles. Traditional in origin, these cyclical phenomena may be observed in the patterns of older societies. Reflections of the past are deemed vital to a more objective and well-rounded perception of current issues.

CJ 318 SPECIAL TOPICS IN CRIMINAL JUSTICE (3) Contemporary analysis of topical criminal justice problems or programs of special interest because of state, federal or international events. The instructor will select an area of study which merits special investigation because of contemporary factors in the external environments in which the criminal justice system must operate. The instructor will relate the special topic to traditional materials, but will emphasize how current circumstances give it a unique nature. Prerequisite: CJ 101, 201, 202, 205, or their equivalent.

CJ 319 ECONOMIC CRIME (3) The manner in which professionals in business are able to manipulate and control computer systems and engage in various types of white collar crime will be examined. Emphasis will be placed on consumer and computer fraud, embezzlement, and particular attention will be focused on corporate crime and on the criminal justice system's attempts to identify, prevent, and control it. Prerequisite: CJ 201, 202, 205, or their equivalent.

CJ 320 CRIMINAL PROCEDURE: FOURTH AMENDMENT RIGHTS OF THE ACCUSED (3) A study of due process, the exclusionary rule, and the legal problems associated with arrests, searches, and seizures. Prerequisite: CJ 205 or its equivalent, or permission of instructor.

CJ 321 CRIMINAL PROCEDURE: FIFTH AND SIXTH AMENDMENT (3) A study of the legal problems associated with interrogations, confessions, entrapment, lineups, and wiretapping and electronic surveillance. Prerequisite: CJ 205 or its equivalent or permission of the instructor.

CJ 330 CRIMINAL JUSTICE ADMINISTRATION (3) An appraisal of the organization and procedures within criminal justice agencies and consideration of the principles of organization and methods adopted by progressive agencies to insure effective criminal justice service to the community. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 331 RESEARCH METHODS IN CRIMINAL JUSTICE (3) An introduction to scientific methodology as related to criminal justice. The course will focus on the development of hypotheses, data collection, data analysis and hypothesis verification. Attention is also given to basic statistical techniques appropriate for criminal justice research. Prerequisite: CJ 101, 201, 205, 202, or their equivalent.

CJ 332 HOMICIDE (3) An in-depth discussion of the legal definitions of and rationalizations for homicide. The statistical aggregates of those occasions will be considered in terms of demographic and ethno-cultural phenomena. The murder episode is examined within the context of morality. Prerequisite: CJ 101 or permission.

CJ 384 CASE STUDY SEMINAR: ADULT OFFENDERS (3) An eight-week class examining the life history of specific adults convicted of committing crimes, their attitudes, associates, criminality, and interaction with the criminal justice system. Each student concentrates on a different individual. Connections between the case material and principal theories about the origins of crime, intervention strategies, and criminal justice institutions also will be considered. A field experience will normally be provided. Prerequisite: CJ 205, or permission of instructor and Junior status or better. Cannot be taken concurrently with CJ 385.

CJ 385 CASE STUDY SEMINAR: JUVENILE OFFENDERS (3) An eight-week class examining the life history of specific juveniles implicated in one or more delinquent acts, their attitudes, associates, delinquency, and interactions with the criminal justice system. Each student

concentrates on a different individual. Connections between the case material and principal theories about the origins of crime, intervention strategies, and criminal justice institutions also will be considered. A field experiences will normally be provided. Prerequisite: CJ 205 or permission of instructor and Junior status or better. Cannot be taken concurrently with CJ 384.

CJ 398 FIELD PRACTICUM IN CRIMINAL JUSTICE (6) The field practicum class involves the student's participation in the day-to-day functions of a publicly funded criminal justice agency. The course is designed to provide students with an opportunity to translate the theoretically oriented classroom experience into practical application. Consists of either 8 weeks of full-time placement or 16 weeks of part-time placement. Prerequisite: Permission of the Instructor.

ECONOMICS AND BUSINESS MANAGEMENT

The Department of Economics and Business Management offers two majors, leading to a B.A. in Economics or to a B.S. in Business Management.

Economics is a problem-based social science dealing with the relevant contemporary issues of unemployment, inflation, monopoly, pollution, income distribution, and productivity. Economics utilizes models, or simplifying constructs, for organizing facts in an effort to develop policy alternatives. The strength of economics is its ability to provide a logical, ordered way of looking at various problems and issues.

Business is the applied science of the possible in the economic world. Management principles serve as guidelines to achieve more effective and efficient performance in business organizations. Business Management offers a clear direction in the pursuit of knowledge in producing, directing, financing, and promoting products and services.

Varied in their objectives and flexible in orientation, the Economics and Business Management programs are geared to prepare undergraduates for successful entry into the job market. In addition, the Economics program gives students the analytical foundation for graduate study in economics, business administration, public administration, urban planning, and related disciplines. The Business Management program provides a sound background in the areas of accounting, finance, management, marketing, and labor relations. This program builds a solid framework for graduate work in business administration, law, public administration, and other fields. Business Management is also an area for certification in Secondary Education (see the department chairperson for more information).

The department's internship program is intended to allow students to apply analytical classroom material to practical experience. Acceptance into an internship program is reserved for second semester juniors and seniors with demonstrated academic competence.

REQUIREMENTS FOR ECONOMICS MAJORS

The department accepts as economics majors only those students who have demonstrated a basic level of ability and interest in economics.

REQUIRED COURSES

EC 101 Principles of Macroeconomics (3)
EC 102 Principles of Microeconomics (3)
EC 201 Microeconomic Theory (3)
EC 202 Macroeconomic Theory (3)
EC 204 Introduction to Mathematical Economics (3)
MA 108 Elementary Statistics (3)
MA 115 Mathematics for Business and Social Sciences (3)

ELECTIVE IN ECONOMICS

EC 300 Money and Banking (3)
EC 301 State & Local Finance (3)
EC 302 Economic History of United States (3)
EC 303 Economics of Development (3)
EC 304 Urban Economics (3)
EC 305 Introduction to Econometric Methods (3)
EC 306 Managerial Economics (3)
EC 311 Economic Fluctuations and Business Forecasting (3)
EC 312 Labor Economics (3)
EC 314 Industrial Organization (3)
EC 315 Public Finance (3)
EC 316 Economic History of Europe (3)
EC 317 Comparative Economic Systems (3)
EC 318 International Economics (3)
EC 319 Development of Economic Thought (3)
MG 338 International Business (3)
EC 350 Contemporary Economic Issues (3)
EC 398 Senior Research Seminar (3)
EC 399 Independent Study (3-6)

ECONOMICS MINOR

The Economics minor program is intended for non-economics majors who choose to achieve some proficiency in economic analysis. It involves a minimum of eighteen credits in Economics.

The program in economics is designed to develop an understanding of economic relationships in contemporary life in order to equip a student to analyze economic issues of social and economic policy. This includes a systematic introduction to the basic theoretical and empirical techniques of economics. The program seeks to accomodate a broad range of student interests including preparation for careers in business or government, and graduate school in economics, business, law, or public administration.

REQUIRED COURSES FOR THE ECONOMICS MINOR - 6 credits

EC 101 Principles of Macroeconomics (3)
EC 102 Principles of Microeconomics (3)

ELECTIVES FOR THE ECONOMICS MINOR - 12 credits

EC 201 Microeconomic Theory (3)
EC 202 Macroeconomic Theory (3)
EC 204 Introduction to Mathematical Economics (3)
EC 300 Money and Banking (3)
EC 301 State & Local Finance (3)
EC 302 Economic History of United States (3)
EC 303 Economics of Development (3)
EC 304 Urban Economics (3)
EC 305 Introduction to Econometric Methods (3)
EC 306 Managerial Economics (3)
EC 311 Economic Fluctuations and Business Forecasting (3)
EC 312 Labor Economics (3)
EC 314 Industrial Organization (3)
EC 315 Public Finance (3)
EC 316 Economic History of Europe (3)
EC 317 Comparative Economic Systems (3)
EC 318 International Economics (3)
EC 319 Development of Economic Thought (3)
EC 350 Contemporary Economic Issues (3)
EC 398 Senior Research Seminar (3)

REQUIREMENTS FOR BUSINESS MANAGEMENT MAJORS

Acceptance in the business management major is competitive. Students who have demonstrated proficiency in their status as pre-business students during their freshman and sophomore years are accepted into the business major upon completion of 54 - 60 credits on a space available basis.

BUSINESS CORE 33 CREDITS

MG 104 Principles of Accounting I (3)
MG 105 Principles of Accounting II (3)
MG 107 Software Applications in Management (3)
MG 207 Financial Management (3)
MG 220 Production/Operations Management (3)
MG 221 Business Management (3)
MG 231 Marketing Management (3)
MG 241 Business Law (3)
MG 250 Quantitative Approach to Business Decisions (3)
MG 325 Business Policy and Strategy (3)
MG 338 International Business (3)

NON-BUSINESS REQUIRED COURSES 18 CREDITS

EC 101 Macroeconomics (3)
EC 102 Microeconomics (3)
EN 103 Speech (3)
EN 392 Business & Technical Writing (3)
MA 115 Math for Business & Social Science (3)
MA 108 Statistics (3)

BUSINESS CONCENTRATIONS (NOT MORE THAN ONE CONCENTRATION PER STUDENT) 15 CREDITS

ACCOUNTING
MG 310 Federal Income Taxation (3)
MG 311 Auditing (3)
MG 315 Intermediate Accounting I (3)
MG 316 Intermediate Accounting II (3)
MG 317 Cost Accounting (3)

FINANCE
MG 318 Advanced Managerial Finance (3)
MG 320/EC 300 Money and Banking (3)
MG 312 Investments (3)
300 Level Finance Elective (3)
300 Level Finance Elective (3)

MANAGEMENT
MG 308 Organizational Development & Behavior (3)
MG 301 Labor Relations (3)
MG 321 Management Information Systems (3)
300 Level Management Elective (3)
300 Level Management Elective (3)

LABOR**
MG 301 Labor Relations (3)
MG 308 Organizational Development & Behavior (3)
MG 313 Collective Bargaining (3)
MG 314 Human Resource Management (3)
300 Level Management Elective (3)

MARKETING
MG 306 Distribution Management (3)
MG 307 Marketing Research Techniques (3)
MG 309 Sales and Sales Management (3)
300 Level Marketing Elective (3)
300 Level Marketing Elective (3)

** NOTE Labor concentration is not available for matriculating students with expected graduation date past 1991.

BUSINESS MINOR

The Business Minor Program is intended for non-business majors who choose to develop some proficiency in the business core area. The minor involves a minimum of eighteen credits in Business chosen from the Area I courses listed below:

MG 104 Principles of Accounting I (3)
MG 105 Principles of Accounting II (3)
MG 107 Software Applications in Management (3)
MG 207 Financial Management (3)
MG 220 Production/Operations Management (3)
MG 221 Business Management (3)
MG 231 Marketing Management (3)
MG 241 Business Law (3)
MG 250 Quantitative Approach to Business Decisions (3)
MG 325 Business Policy and Strategy (3)
MG 338 International Business (3)

COURSES ECONOMICS

EC 101 PRINCIPLES OF MACROECONOMICS (3) An introduction to economic analysis with emphasis on the application of economic principles to an understanding of contemporary problems. Topics to be discussed include: the nature of a market economy, national income, employment and fiscal policy, characteristics of the American monetary and banking system, economic growth and international trade.

EC 102 PRINCIPLES OF MICROECONOMICS (3) Emphasis on the economics of the firm and resource allocation. Topics to be discussed include: the price and output determination under pure competition, pure monopoly, monopolistic competition, and oligopoly, the resource market, international trade, and an evaluation of American capitalism. Prerequisite: EC 101

EC 201 MICROECONOMIC THEORY (3) An examination of the basic assumptions and methods of analysis employed in microeconomic theory. Topics studied include elasticity concepts, demand derivation, production and cost relationships, pricing under various market structures, and distribution theory. These topics are integrated through short and long-run analysis as applied to the firm and industry. Lecture and exercises of concepts is included. Prerequisite: EC 102.

EC 202 MACROECONOMIC THEORY (3) Analysis of the level of national income, employment, price level and the rate of growth in the economic system. Includes analysis of

consumption and saving, factors affecting private investment, prosperity and depression, interactions between money and national income, implications for public policy. Lecture, discussion and exercise work. Prerequisite: EC 101.

EC 204 INTRODUCTION TO MATHEMATICAL ECONOMICS (3) A study of the principal mathematical formulations used in economic analysis. Topics to be discussed include: elementary mathematical economics confined to the fields of college algebra and trigonometry, differential and integral calculus and its relation to the concepts of elasticity and production functions, and differential and difference equations and their employment in models of stable competitive equilibrium. Prerequisites: EC 101 and EC 102. One year of college algebra or permission of instructor.

EC 300/MG 320 MONEY AND BANKING (3) A study of the relations, institutions, policies, and problems of the American monetary system. The course covers both theoretical and practical aspects of the system as it relates to the goals of full-employment, price stability, and economic growth. Prerequisite: EC 101.

EC 301 STATE AND LOCAL FINANCE (3) Analysis of state and local government revenue sources, expenditures, and fiscal surplus. Problems of intergovernmental fiscal relations are analyzed with particular relevence to the State of Massachusetts in its fiscal problems. Prerequisite: EC 102.

EC 302 ECONOMIC HISTORY OF THE UNITED STATES (3) A study of the evolution of the American economy from colonial times to 1960. Recent analysis is utilized to evaluate the economic impact of industrialization, land policy, slavery, wars, banking, and transportation. The role of the government is carefully traced in this context. Prerequisites: EC 101 and 102.

EC 303 ECONOMICS OF DEVELOPMENT (3) Examination and analysis of the major theories of economic development: "surplus labor," capital accumulation, historical and cultural approaches. Investigates principal policy alternatives: foreign trade problems, ``choice technique,'' sectoral balance, education, land reform. Discusses issues in foreign aid and gives a limited number of country studies. Prerequisite: Any 3-credit course in Economics.

EC 304 URBAN ECONOMICS (3) An economic analysis of contemporary urban issues. The course utilizes economic theory to examine and evaluate problems that affect the urban sector specifically, and the economy in general. Topics analyzed include; rent inequality, discrimination, the regulation of public utilities, and the economics of crime. Prerequisite: EC 102.

EC 305 INTRODUCTION TO ECONOMETRIC MODELS (3) An introduction to quantitative methods in economics. Topics to discussed include: probability; random variables; frequency functions, sampling; descriptive statistics; estimation and hypothesis testing; regression analysis; stochastic formulations of economic relationships such as consumption, production, and wage functions; systems analysis of these functions. Prerequisites: EC 101, EC 102, and MA 108 or permission.

EC 306 MANAGERIAL ECONOMICS (3) An emphasis on the application of microeconomic theory in the solution of everyday business problems faced by the firm relating to production, costs, demand, expenditures, etc. A course designed for Business Management students. Prerequisite: EC 101 and 102.

EC 311 ECONOMIC FLUCTUATIONS AND BUSINESS FORECASTING (3) A study of the behavior of the economy over time. Analysis of the business cycle in historical perspective and in contemporary terms. Explanations for the variability in employment, prices, and growth will be discussed. In addition, the government's proper role in a mixed economy will be explored. Prerequisite: EC 101.

EC 312 LABOR ECONOMICS (3) An examination of the theory of wage determination and labor markets. Topics include the economics of collective bargaining, evaluation of criteria used for wage determination, and collective bargaining issues and procedures on the economy. Prerequisite: EC 102.

EC 314 INDUSTRIAL ORGANIZATION (3) An examination of modern business structure, conduct, and performance in imperfect markets. An emphasis on the development of public policy in the United States including federal anti-trust legislation and its judicial interpretation and regulation of business practices through the Federal Trade Commission. Prerequisite: EC 102.

EC 315 PUBLIC FINANCE (3) The role of government in attaining an efficient allocation of resources and an equitable distribution of income. Emphasis is placed on criteria for the evaluation and selection of public expenditure and tax programs including the problem of coordinating federal, state and local finance. Special attention is given to current

policy issues. Prerequisite: EC 101 and EC 102.

EC 316 ECONOMIC HISTORY OF EUROPE (3) An analysis of the economic development of Europe from feudalism through the end of World War II. Special emphasis will be given to the rise and fall of the feudal economy, the transformation of agriculture, mercantilism, and the development of capitalism including the Industrial Revolution, urbanization, and economic imperialism. Prerequisite: EC 101.

EC 317 COMPARATIVE ECONOMIC SYSTEMS (3) A comparative economic analysis of the basic theories underlying capitalism, socialism, communism and the typical variants of these economic systems. The actual systems as they are exemplified by modern American capitalism, British and Swedish socialism and the hybrid systems of India and other developing countries will be evaluated. Prerequisite: EC 101 and EC 102.

EC 318 INTERNATIONAL ECONOMICS (3) An investigation into the theoretical and empirical basis of international trade and factor movements. The course deals with such basic topics as barriers to trade, the balance of payments, international monetary relations within the context of an historical perspective, present conditions, and future expectations. Prerequisites: EC 101 and 102.

EC 319 DEVELOPMENT OF ECONOMIC THOUGHT (3) Analyzes the content and limitations of contemporary economic thought in contrast with earlier theoretical systems. Traces the evolution of systematic economic thinking through the dual influence of internal logical development and the external social and intellectual environment. Central economic issues that are of current significance, such as price formation, distribution of wealth and income, population and international trade, etc., will be analyzed in historical perspective. Prerequisites: EC 101 and EC 102.

EC 350 CURRENT ECONOMIC ISSUES (3) Analysis of contemporary issues in domestic and international economic theory and policy at both macro- and micro-economic levels, including study of public vs. private sector relationships, the market structure, and the industrial base. Prerequisites: EC 201 or 202 or permission of instructor.

EC 398 SENIOR RESEARCH SEMINAR (3) Training in the application of economic theory and measurement to specific economic problems of local, national or international significance and in the preparation of research papers. Class discussion of student reports and assigned readings dealing with issues of economic theory and policy. Under faculty guidance, students will select a topic, design a research procedure, and complete an individual or group project. Prerequisites: Microeconomic Theory and Macroeconomic Theory.

EC 399 INDEPENDENT STUDY (3-6) Prerequisite: Permission.

BUSINESS MANAGEMENT COURSES

NOTE: Junior status is required for all courses except for those marked with an asterisk (*).

*MG 101 INTRODUCTION TO BUSINESS (3) An introduction to the field of Business Management. The course covers types of businesses, their organization, and the general functions of financial management, production management and marketing management. (For non-business majors only).

*MG 104 PRINCIPLES OF ACCOUNTING I (3) Development of a framework of concepts underlying the preparation of corporate financial statements which are useful to investors, economists, the general public, and other interested external parties. The balance sheet and income statement as conventionally reported by American corporations are studied as to methodology for their preparation, their interpretation, and their strengths and limitations. Prerequisites: MG 107.

*MG 105 PRINCIPLES OF ACCOUNTING II (3) Continuation of the emphasis in Principles of Accounting I upon corporate financial reporting to external parties. An introduction to the concepts underlying the preparation of accounting information which is useful to management in the planning and control of business operations. Prerequisite: MG 104.

*MG 107 SOFTWARE APPLICATIONS IN MANAGEMENT (3) Examines software designed for management including spreadsheets, data-base packages, and mainframe communications. Provides practical experience as well as systems theory necessary for managerial decision-making. Fundamentals of computer literacy and logical thinking, as they relate to management, are emphasized.

MG 205 FUND ACCOUNTING (3) Concerns the accounting theory applied to nonprofit entities such as municipalities, universities, hospitals, and churches. Content constitutes a

significant portion of the Uniform Certified Public Accountant examination. Prerequisite: MG 104.

MG 207 FINANCIAL MANAGEMENT (3) An analysis of the financial structure of American business with major emphasis on corporate finance. Among the topics to be considered are: promotion, government regulation of security sales, stocks, bonds, and stock market, investment banking, corporate dividend and investment policies, security analysis, working capital, corporate capital structure, government regulation of financial policies and mutual funds. Some attention is given to broad economic problems such as the influence of corporate finance on prices, investment, saving, prosperity and depression. Prerequisite: MG 104.

MG 210 BUSINESS DATA PROCESSING APPLICATIONS (3) Examines computer applications to business systems of purchasing and receiving, inventory control, production control, distribution and billing, accounts receivable, accounts payable, and payroll. Material covered also includes basic mathematics for computers and the operation of data processing equipment. Prerequisite: MG 104.

MG 220 PRODUCTION/OPERATIONS MANAGEMENT (3) Provides students with a working knowledge of manufacturing and purchasing operations. The course covers: manufacturing methods, location and layout, production planning and control, purchasing, inventory control, quality control, labor relations, and general manufacturing management. Prerequisite: MG 104.

MG 221 BUSINESS MANAGEMENT: A SURVEY OF ORGANIZATIONAL DEVELOPMENT AND MANAGEMENT PRINCIPLES (3) Provides a general probe into the role of management in business, exploring concepts of management used in business, various issues of Business Management structures and the organization of management. Topics to be studied include an examination of a systems approach to management, human behavior, personality conflict in organizations and techniques of creative management. The course shall touch upon several leadership development strategies, models of executive action in business policy or control, and provide a broad comprehensive over-view of current issues concerning women, minorities and social responsibility in the field of Business Management. Prerequisite: MG 107

MG 231 MARKETING MANAGEMENT (3) A developmental survey into the field of Marketing in business, which will study the roles of marketers in business and society as a whole. Concentration shall be placed on defining what is marketing, what does a marketing executive do, what are the various systems of marketing, and what economic factors effect marketing. In order to probe these questions, the course shall examine consumer behavior, purchase decision-making, product pricing, policy and planning, channels of distribution in business, and marketing institutions and organizations. Further dimensions of advertising, marketing research, analysis, forecasting, and marketing information flows, controls and performance shall be explored. Prerequisites: Junior status.

*MG 241 BUSINESS LAW I (3) Develops an understanding of the philosophical and logical development of the law and its relationship to business through the use of text and case analysis. Explores, in-depth, substantive contract law, which forms the basis for business transactions, commencing with the initial negotiation and offer through performance of legally binding obligations and the remedies available if obligations are not performed.

MG 242 BUSINESS LAW II (3) Continuation and extension of the principles of Business Law I into other areas of law directly affecting modern business. Emphasis is on agency law, including employment; and property law both real and personal. Introduces forms of business organizations and commercial and financial transactions. Prerequisite: MG 241.

MG 250 QUANTITATIVE APPROACHES TO BUSINESS DECISIONS (3) Covers the application of quantitative techniques to business problem-solving and decision making. Subjects include linear programming, probabilities, simulations, PERT, queuing, and game theory. The application of these analytical tools to business decision problems such as: distribution, inventory control, product mix, scheduling, competitive strategy, and forecasting is covered through case analysis. Approximately 1/3 of the course is devoted to case work. Prerequisites: MG 207, 220, 231.

MG 301 LABOR RELATIONS (3) Examines the legal relationship between employer and employee. Uses text reading and case analysis to cover labor legislation, union organizations and practices, unfair labor practices, employment discrimination, and affirmative action programs. Prerequisite: MG 241.

MG 302 SMALL BUSINESS MANAGEMENT (3) A detailed study of the knowledge required and the factors involved in starting and operating a small business. Cost and money management are emphasized. Other areas covered include: product selection, location and timing, pricing and other marketing techniques, purchasing and inventory control, and the personal factors contributing to success. Prerequisites: MG 231, 241.

MG 303 OFFICE MANAGEMENT AND PROCEDURES (3) Examines the administrative procedures necessary to control a business. These include office personnel, equipment, procedures, forms design and control, and business record keeping and reporting. Prerequisites: MG 221.

MG 304 MANAGERIAL ACCOUNTING (3) Designed to be used by students with a basic financial accounting background. Emphasis is on uses of accounting data internally by managers in setting plans and objectives in controlling operations. Topics covered will be management decision models, cost behavior patterns, profit planning and control. Prerequisite: MG 105.

MG 306 DISTRIBUTION MANAGEMENT (3) A vital part of the marketing world today is efficient physical distribution. Here the physical flow of products from manufacturers to retail stores is studied in depth. Included are the following areas: transportation, warehousing, inventory control, packaging, and materials handling. Prerequisite: MG 231.

MG 307 MARKETING RESEARCH TECHNIQUES (3) Reviews the specialized techniques for conducting marketing research and how they contribute to marketing strategy. Material covered includes quantitative and qualitative research, simulation, forecasting, survey preparation, and secondary source analysis. Prerequisite: MG 231.

MG 308 ORGANIZATIONAL DEVELOPMENT & BEHAVIOR (3) Examines the foundations for understanding individual and group behavior and relates these points to the problems faced by managers in organizations. Emphasis is on topics of study relevant to developing managerial effectiveness in interrelationships with other organizational members. Course attempts to develop an understanding of the relationship between individual and organization and to identify management skills that can contribute to effective performance. Prerequisite: MG 221.

MG 309 SALES AND SALES MANAGEMENT (3) A course in effective salesmanship and how to set up and control a field sales organization. Course emphasizes the role of personal selling in the marketing mix and covers all basic sales management issues. Prerequisite: MG 231.

MG 310 FEDERAL INCOME TAXATION (3) A first course in Federal Taxation which provides an overview of past and present Internal Revenue Codes. Emphasis is on personal and business income tax procedures and preparation. Exclusions, deductions, and income from proprietorships, partnerships, rental units, trusts, and estates, dividends, and interest are included. Prerequisite: MG 105.

MG 311 AUDITING (3) Covers the principles of auditing, using accounting principles as criteria. Auditing procedures and analysis of supporting documentation materials is emphasized. A practice audit and case studies are required. Prerequisite: MG 105.

MG 312 INVESTMENTS (3) A study of various investment securities for analysis and valuation. Included are corporation, public utility, banking, and investment company securities. Prerequisite: MG 207.

MG 313 COLLECTIVE BARGAINING (3) Combines the historical, behavioral, and legal elements covering the process of negotiating contractual conditions of employment. Current labor agreements are studied and distinctions between public and private sectors are identified. Prerequisite: MG 241.

MG 314 HUMAN RESOURCE MANAGEMENT (3) Covers the process of manpower planning and utilization in organizations. Personnel forecasting, employment, training and development, placement, motivation, wage and salary administration, employee benefits, and performance evaluation are covered. Special emphasis is given to problems arising between manager and subordinates, the professional in human services, minority groups, the hard-to-employ worker, and the impact of public policy. Prerequisite: MG 241.

MG 315 INTERMEDIATE ACCOUNTING I (3) Intermediate Accounting I advances the depth of accounting training that was pursued in the Principles course. Further study of financial reporting and of recent developments in valuation and reporting practices will be made. An appreciation of GAAP and SEC developments will be required. Prerequisite: MG 105.

MG 316 INTERMEDIATE ACCOUNTING II (3) A continuation of the professional theory and problem solving in Accountancy developed in MG 315, with emphasis on research. Prerequisite: MG 315.

MG 317 COST ACCOUNTING (3) Basic cost accounting methods for data collection, processing and reporting. Emphasis is on direct, job, process and standard cost systems. Estimating and profit calculation are also covered. Prerequisite: MG 105.

MG 318 ADVANCED MANAGERIAL FINANCE (3) A study of the financial operation and control of a corporation. Financial policies, practices, and organization are included. Prerequisite: MG 207.

MG 319 INVESTMENT PORTFOLIO ANALYSIS (3) Advanced analysis of market behavior involving detailed discussion of modern portfolio theory. The modern portfolio theory approach is contrasted with other evaluative techniques. Prerequisite: MG 312.

MG 320/EC 300 MONEY AND BANKING (3) A study of the relations, institutions, policies, and problems of the American monetary system. The course covers both theoretical and practical aspects of the system as it relates to the goals of full-employment, price stability, and economic growth. Prerequisite: EC 101.

MG 321 MANAGEMENT INFORMATION SYSTEMS (3) Provides the background and perspective necessary to understand, utilize and interact with integrated, management information systems. Various techniques from industrial engineering, computerized data processing, and operations research are covered. These techniques are then applied to the planning, design and implementation of information systems. Course involves case work. Prerequisite: MG 107.

MG 325 BUSINESS POLICY AND STRATEGY (3) Emphasizes management planning and control techniques in solving business problems and in determining strategy for sales and profit growth. An integrated case study approach will be used. The course will illustrate the many factors that influence complex business decisions. FOR SENIORS ONLY. Prerequisites: MG 207, 221, 231, 241.

MG 326 INSURANCE AND RISK MANAGEMENT (3) Provides the student with an in-depth understanding of all phases of insurance and risk management. The topics to be studied are basic principles, the nature and operation of insurance business, and the nature of risk and risk management. Included in these topics are property insurance; casualty insurance; life, accident, and health insurance; and group and social insurance. Prerequisite: MG 207.

MG 327 SMALL BUSINESS INSTITUTE (3) Small Business Institute is a cooperative effort between the Small Business Administration and W.S.C.'s Business Management Department. The course will supplement the academic training of business students with "real-world" problems from the small business sector. Student teams from the Business Management Program will furnish in-depth management assistance to small businesses. Areas of assistance include: Accounting & record keeping, market research, advertising & sales promotion, inventory control, etc. Prerequisite: junior or senior status, & permission of department.

MG 328 ADVERTISING TECHNIQUES AND STRATEGIES (3) Vital to the world of modern business is an understanding of the role of advertising. This course provides a study of the techniques and practices of advertising today. Strategies and procedures for campaign design and execution will be examined. Students will take an advertising idea through the various stages of planning, visualizing and writing advertising copy. Prerequisite: MG 231.

MG 329 PRINCIPLES OF MODERN BANK MANAGEMENT (3) This course teaches the theory and practice of modern bank management, which includes the following: portfolios and functions, branch systems, holding companies, multi-national banking systems, asset and liability management in commercial banks, trust services and strategies. It also includes a review of other financial intermediaries. Prerequisite: MG 207.

MG 330 CONTEMPORARY PROFESSIONAL ACCOUNTING PROBLEMS (3) Examines professional accountancy problems, design of format solution sets, and guides to underlining theory. This course supplies an integrated approach to the problems and theory sections of the CPA and CMA exams. Prerequisite: MG 316.

MG 331 ADVANCED ACCOUNTING (3) An intensive course that specializes in areas of accounting including: partnerships and joint ventures, branches, consolidated statements, segment reporting, interim statements, multi-national companies, bankruptcy and reorganization, installments and consignments, fund accounting, and estates and trusts. Prerequisite: MG 316.

MG 332 THE MONEY MARKET: THEORY AND PRACTICE (3) The course focuses on short-term, liquid investments. The study of domestic and international instruments leads to analysis of the yield curve, the market makers, arbitrage and the role of the central bank in determining the price and supply of money. Prerequisite: MG 207.

MG 333 LAW AND BUSINESS: CURRENT ISSUES (3) An upper level course, the objective will be to develop an understanding of the impact of the law on the complex climate in which the

contemporary business entity operates. Students will examine the legal environment of managerial behavior in order to understand the philosophical, political, historical, social and ethical bases of American business. Current problems, including antitrust, unfair competition, regulation and deregulation, marketing, consumerism, corporate social responsibility, and business ethics, will be explored. Prerequisite: MG 241.

MG 334 SEMINAR IN NEW VENTURE IN BUSINESS (3) The objective is to understand the pervasiveness of conceptualizing, investigating, planning and establishing a new venture. Students will explore the interrelationships among the complex elements necessary to make an innovative idea into a new, profit making venture. The principles studied will apply equally to small, entrepreneurial businesses and new product or process development within a large organization. Students will study the elements that lead to success; then, through simulation and participation, will create a prototype business plan analyzing and integrating the functional, organizational and financial aspects of the venture. Prerequisites: MG 231, 241, 207, and permission of department.

MG 335 MARKETING COMMUNICATIONS (3) Exposes students to all aspects of marketing communications and promotion, including advertising, personal selling, sales promotion, public relations, publicity, and word of mouth. It integrates communication theory with pragmatic aspects of the organizational/environmental interface. The course also covers non business promotion, services promotion, promotion management, consumer correspondence, and consumer education. Prerequisite: MG 231.

MG 336 MANAGEMENT OF RETAILING ENTERPRISES (3) Retailing concepts, structure, and competition are studied and evaluated. Attention is given to techniques and procedures of purchasing goods for resale. The necessity of keeping merchandise assortments adjusted to constantly changing consumer demands is analyzed. Retail organizational trends and management, market analysis, store location, sales forecasting, and retail advertising will be examined. Prerequisite: MG 231.

MG 337 CONSUMER BEHAVIOR (3) By gaining a better understanding of the factors that affect consumer behavior, marketers are in a better position to predict how consumers will respond to their marketing strategies. Consumer Behavior draws on the Social Sciences in addition to the quantitative characteristics of the market such as: population patterns, income distribution, living standards, and occupational changes.

MG 338 INTERNATIONAL BUSINESS (3) Provides an opportunity to bring the tools and information gained in previous courses to the task of solving managerial problems in international and foreign environments. Focuses on an analysis of market opportunities and methods of entry in foreign business areas and on related business problems. Prerequisite: senior status business major or permission of instructor.

MG 350 SPECIAL TOPICS (IN BUSINESS MANAGEMENT) (3) Examines and analyzes contemporary topics in Business Management. Educates the student in the application of strategy and integrates fundamental problem solving techniques into contemporary situations. Focuses on current business issues, yet takes a traditional perspective.

MG 351 TEACHING METHODS IN BUSINESS (3) Designed to assist students in developing the teaching of business subjects in the middle and secondary schools. Includes: new approaches to the study of business; development of behavioral objectives; presentation of effective teaching methods and lesson plans. This course is a required preparation for students enrolled in the Business Education Certification Program. Some class time will be spent evaluating textbooks and other materials. Prerequisite: permission of instructor.

MG 398 BUSINESS INTERNSHIP (3-15) Full time business student/ must be a second semester junior or senior & have permission of department.

MG 399 INDEPENDENT STUDY Prerequisite: Permission of Department.

EDUCATION*

Since its founding in 1836, Westfield State College has been a leader in teacher preparation. To become a competent, professional teacher of today, Education Majors acquire knowledge in a wide variety of areas. Therefore, our teacher education programs represent an integration of the courses and course sequences in our department and those of the college's other academic departments.

All of our undergraduate teacher education programs have been accredited by the New England Association of Schools and Colleges (1980-1990) and by the National Council for the Accreditation of Teacher Education (1977-1999). Interstate Certification Compact approval from the Massachusetts Department of Education was awarded for elementary, secondary, and special education programs (1983-1992).

Teacher-education programs at the elementary level include early childhood education, special education, and elementary education. At the secondary level, the approved programs include English, history, mathematics, general science, chemistry, biology, business management, and occupational education. Approved special education programs are available for those who wish to work with young children with special needs , moderate special needs, (elementary or secondary) and/or severe special needs. Admissions and retention criteria for Teacher Certification Programs are maintained by the Department of Education. A student must have a grade point average of 2.3 to be recommended for enrollment in practicum.

A complete listing of teacher preparation programs sponsored or co-sponsored by the Department of Education includes:

02S Young Child with Special Needs
03C Early Childhood (K-3)
04D Elementary (1-6)
11E English (5-9)
11F English (9-12)
12E History (5-9)
12F History (9-12)
15E Mathematics (5-9)
15F Mathematics (9-12)
16F Chemistry (9-12)
18F Biology (9-12)
19E General Science (5-9)
19F General Science (9-12)
21F French (9-12)
23F Spanish (9-12)
35H Business Management (5-12)
52L Children with Severe Special Needs
53H Children with Moderate Special Needs (5-12)
53J Children with Moderate Special Needs (N-9)

ELEMENTARY EDUCATION

The Elementary Education programs are designed to prepare outstanding teachers. Students enrolled in a Bachelor of Science in Education program may declare either of the elementary programs as their major field. The two certification programs are Early Childhood (Grades K-3) and Elementary Teachers (Grades 1-6).

Generally, student's first two years are devoted to acquiring a broad base in the liberal arts. During this time, students also take introductory Education courses and have practical experiences in the classroom which helps confirm their desire to enter the teaching profession. During their last two years of college, students pursue their professional sequence, complete their area of concentration and when appropriate expand their opportunities for a liberal education. There is a gradual involvement in a series of theoretical, simulated and actual experiences preparatory to the culminating activity of a full semester, student teaching practica. Undergraduates who have completed all the requirements of either program, are recommended by the Department of Education to the certifying officials of the Commonwealth of Massachusetts.

* The Massachusetts State Department of Education regulations for teacher certification are currently being revised.

Program Requirements Early Childhood (Grades K-3)

ED 102 Introduction to Teaching (1)
ED 170 Education of the Exceptional Child (3)
ED 201 Tests and Measurements-Diagnosis (3)

ED 303 Reading: K-6 (3)
ED 305 Methods and Materials in Language Arts (3)
ED 307 Philosophy of Education (3)
ED 308 Early Childhood Curriculum (3)
ED 309 Children's Literature (3)
ED 319 Principles of Teaching I (2)
ED 320 Principles of Teaching II (2)
ED 323 Field Experience I (1)
ED 324 Field Experience II (1)
ED 336 Practicum: Early Childhood (K-3) (12)
ED 350 Organizational Settings in Early Childhood (3)
ED 381 Seminar: Early Intervention (3)
ED 396 Seminar Recent Developments: Computers in Education (3)
HE 301 Health Education in the Elementary School (3)
PE 301 Physical Education in Elementary Schools (3)
PY 201 Child Psychology (3)

Program Requirements Elementary Teachers (Grades 1-6)

ED 102 Introduction to Teaching (1)
ED 170 Education of the Exceptional Child (3)
ED 201 Tests and Measurements-Diagnosis (3)
ED 303 Reading: Grades K-6 (3)
ED 305 Methods and Materials in Language Arts (3)
ED 306 Elementary School Curriculum Design (3)
ED 307 Philosophy of Education (3)
ED 319 Principles of Teaching I (2)
ED 320 Principles of Teaching II (2)
ED 323 Field Experience I (1)
ED 324 Field Experience II (1)
ED 338 Practicum: Elementary School 1-6 (12)
ED 396 Seminar Recent Developments: Computers in Education (3)
PY 201 Child Psychology (3)

Students may select both a degree and certification program. In addition, an 18 hour minor is required for all students in the elementary education program. This minor must be in an area which is regarded as an elementary school discipline. These minors may include Reading, Social Studies, Mathematics, the Arts, Health and Physical Education, Science, or Communication.

SPECIAL EDUCATION

Massachusetts State law requires that children with special needs are to be served non-categorically and within the least restrictive environment possible. Federal law P.L. 94-142, The Education of All Handicapped Children's Act reinforces the previous changes and guarantees full education and due process for the handicapped.

Regulations designed to implement these laws clearly state that the need for special education teachers provide services to children with a wide range of needs. Therefore, our Special Education Programs build upon this mandate by providing a number of options for becoming an up-to-date special education teacher. Three programs are available to students enrolled in this area:

1. Teacher of Children with Moderate Special Needs
2. Teacher of Children with Severe Special Needs
3. Teacher of Young Children with Special Needs

Entry into the Moderate Special Needs Program requires that the applicant have a prior classroom certificate (early childhood; elementary; middle or secondary subject areas; or special subject such as music, art or physical education). Students enrolled in this program are dual majors, i.e. Moderate Special Needs plus a basic area as previously described.

The other two programs (Severe Special Needs, Young Children with Special Needs) are separate certificate programs and students in either program may be designated solely as Special Education Majors.

In general, the Special Educator is trained in the educational, social, emotional and vocational influences of developmental deviations; observation, identification, assessment and programming processes; adaptation and development of curriculum materials; language acquisition; analysis of behavior; the development and implementation of individual educational programs; the knowledge of legislation; and comprehensive support services for special needs populations.

Program Requirements Moderate Special Needs (N-9, 5-12)*

ED 102 Introduction to Teaching (1)
ED 170 Education of the Exceptional Child (3)
ED 370 Speech and Language Problems (3)
ED 371 Identification, Assessment, Placement and Programming (Moderate) (4)*
ED 373 Clinical Experience in Special Education (Moderate) (3)*
ED 375 Comprehensive Support Services in Special Education (3)
ED 376 Developmental Disabilities (3)
ED 377 Students with Specific Learning Problems (3)
ED 379 Students with Special Behavioral/Emotional Needs (3)
ED 388 Practicum: Moderate Special Needs (6) [At appropriate level]
PY 201 Child Psychology (3)*

Program Requirements Severe Special Needs

ED 102 Introduction to Teaching (1)
ED 170 Education of the Exceptional Child (3)
ED 367 Identification, Assessment, Programming and Placement (Severe) (4)
ED 370 Speech and Language Problems of Children with Special Needs (3)
ED 373 Clinical Experiences in Special Education (Severe) (3)
ED 375 Comprehensive Support Services (3)
ED 376 Developmental Disabilities (3)
ED 379 Students with Special Behavior/Emotional Needs (3)
ED 385 Developing and Administering Community Based Resources (3)
ED 386 Education and Training of the Substantially Handicapped Student (3)
ED 389 Practicum: Severe Special Needs (12)
ED 396 Seminar Recent Developments: Computers in Education (3)
PY 201 Child Psychology (3)

Program Requirements Teacher of Young Children with Special Needs

ED 102 Introduction to Teaching (1)
ED 170 Education of the Exceptional Child (3)
ED 350 Early Childhood Settings (3)
ED 368 Identification, Assessment, Placement and Programming (Young Children) (4)
ED 370 Speech and Language Problems in the Special Needs Child (3)
ED 373 Clinical Experience in Special Education (Young Children) (3)
ED 375 Comprehensive Support Services in Special Education (3)
ED 376 Developmental Disabilities (3)
ED 379 Students with Special Behavioral/Emotional Needs (3)
ED 381 Seminar: Early Intervention for Young Children with Special Needs (3)
ED 388 Practicum: Young Children with Special Needs (12)
ED 396 Seminar Recent Developments: Computers in Education (3)
PY 201 Child Psychology (3)

SECONDARY EDUCATION

The Secondary Education program provides students with basic tools for teaching in select academic disciplines at the middle school, junior, and senior high schools. They emphasize instructional methods and strategies for teaching the various academic subjects with an emphasis on helping the student become skilled at communicating the principles and concepts basic to the academic subject. The programs are structured so that students gain first hand experience in actual classroom situations early in their college studies, usually not later than the sophomore year. Thus, students are better able to make judgements relative to a future career in teaching. With this emphasis on content in the academic discipline and intensive preparation in simulated and actual teaching situations, students experience and demonstrate competencies required for successful teaching.

Students may elect to prepare for teaching in any one (or a combination of) the following areas: Art (K-12), Biology (9-12), Business Management (5-12), Chemistry (9-12), English (5-9, 9-12), French (9-12), General Sciences (5-9, 9-12), History (9-12), Mathematics (5-9, 9-12), Music (K-12), Physical Education (5-9, 9-12), Spanish (9-12).

In addition to selecting a certifiable major, students follow a program that is termed the professional sequence in Education. Students who complete all requirements are endorsed by our Department of Education for teacher certification.

Secondary Education also offers a Community Service Placement. This is a six credit course which provides field work for students who wish to augment their teacher preparation sequence with additional clinical experience and for students in any major who wish to enroll in this course as an elective. Freshman, who plan to follow the professional

sequence in Secondary Education, should make an appointment to see the department Chair.

Program Requirements include a course in interpersonal relations and academic methods in addition to the following education courses:

Middle School (5-9) Subject Specialist

ED 155 Structures and Functions (3)
ED 170 Education Exceptional Children (3)
ED 359 Middle School (3)
ED 364 Practicum: Middle School (12)
ED 396 Seminar Recent Developments: Computers in Education (3)

Program Requirements Secondary School Level (9-12)

ED 155 Structures and Functions (3)
ED 170 Education Exceptional Children (3)
ED 356 Teaching and Learning (3)
ED 369 Practicum: Secondary School (12)
ED 396 Seminar Recent Developments: Computers in Education (3)

OCCUPATIONAL EDUCATION

In cooperation with the Division of Occupational Education of the State Department of Education, Westfield State College offers a degree program for vocational teachers. This is a Bachelor of Science in Education (Vocational) for teachers of trades. The students in this program are later employed either in their trade area, or in a vocational technical school, or in a comprehensive high school.

Since the students in this program are employed during the day, the program is offered on a part-time basis. In the Commonwealth of Massachusetts a degree is not a requirement for teaching a trade in a vocational school.

Program Requirements Occupational Education

ED 141 Educational Psychology Applied to Occupational Education (3)
ED 210 Teaching Methods in Vocational Education (6)
ED 240 Occupational and Training Information (3)
ED 210 Fundamentals of Vocational Education (3)
ED 342 Supervision of Vocational School (3)
ED 212 Management of Vocational Environments (3)
ED 214 Supervised Internships (3)
ED 343 Appraisal and Evaluation Techniques in Occupational Education (3)
ED 344 Curriculum Development in Occupational Education (3)
ED 345 Labor Laws Relating to Occupational Education (3)
ED 347 Principles and Practices of Occupational Guidance (3)

Trade and Teaching Experience: 10-20 credits which may be granted by the State of Massachusetts to persons working toward State approval for vocational teaching.

Students, who have four years teaching experience in a state-aided day vocational school and a minimum of eighty credits toward the degree, may apply for Trade Experience and Professional Improvement (i.e. workshops, conferences, institutes, etc.) credit as part of the elective core.

JUNIPER PARK SCHOOL

This elementary school is owned by Westfield State College and administered by the City of Westfield Public Schools. It is located adjacent to the college campus. Teacher-education students have the opportunity to observe team teaching, differentiated staffing, demonstration lessons, and innovative curricula taught by master teachers. Juniper Park School affords pre-service and in-service students opportunities to interact with pupils in Grades K-4.

The school staff represents a full range of education personnel including specialists and special educators. This staffing pattern allows Westfield State College students in various teacher-education programs to learn more about their chosen professional area. Westfield State College programs leading to certificates in early childhood education, elementary education, special education, art, music, physical education, and others rely upon the school's staff and physical facilities for pre-practicum and practicum placements of pre-service students.

COURSES

ED 102 INTRODUCTION TO TEACHING (1) Assignment to various educational settings provides prospective teachers with an opportunity to observe individuals, small groups, and whole classes. Students visit with cooperating practitioners for at least 15 contact hours. As a result, students gain understanding about their personal and career goals relative to the teaching field.

ED 103 INTRODUCTION TO TEACHING II (1) Field experience for undergraduates who are desiring further observational experience, as well as those studying in other academic disciplines.

ED 105 IMPROVEMENT OF READING I (3) The course is expressly designed to provide a customized approach to help the student to improve in his/her reading skills. Major areas include the improvement of the student's comprehension, the development of the student's study skills habits and techniques. Scheduling for this course will be highly individualized and flexible, with classes arranged to best suit the student's needs.

ED 106 IMPROVEMENT OF READING II (3) Sequel to ED 105. Some students may take a second semester of the above.

ED 141 EDUCATIONAL PSYCHOLOGY APPLIED TO OCCUPATIONAL EDUCATION (3) Organized around major discussion topics with particular reference to their application in the vocational schools. Among the topics considered are: motivation, readiness, climate for learning, level of aspiration, and the various types of learning.

ED 155 STRUCTURE AND FUNCTIONS OF THE SECONDARY SCHOOL (3) Discussion of various aspects of the secondary school program including co-curricular activities, scheduling, fiscal procedures, legal responsibilities, public relations, systematic environment, and other areas of relationship and interaction. Emphasis will be placed upon the interdependence of the components of the modern secondary school and the role functions of the secondary school. On-site visits to a selected secondary school, research projects (group and individual), and evening panel discussions with members of various school systems will be part of the course requirements.

ED 170 EDUCATION OF EXCEPTIONAL CHILDREN (3) Introductory course intended as a survey course for both prospective teachers and individuals who are considering working with children who have special needs. It is also intended to serve as an introduction to the special education field.

ED 201 TESTS AND MEASUREMENTS-DIAGNOSIS (3) Examines underlying mathematical, psychological, and social principles pertaining to evaluation and applications of principles to standardized and teacher-made tests. Considered are individual and group, verbal and non-verbal, criterion-referenced, competency and performance-based tests. Diagnosis of particular children with serious learning problems in the area of basic skills; perceptual-motor; speech and language; writing; and the affective domain, will be studied.

ED 202 COMMUNICATION THROUGH READING (1-3) Expressly designed to provide a customized approach to help the student to learn the various techniques of comprehension of literal, interpretive, and critical levels; identify organizational patterns, develop vocabulary; and adjust the rate of reading in a wide variety of materials. The course is designed to provide opportunities for the individual to contract in the above areas, earning from one to three credits. Scheduling for this course will be highly individualized and flexible, with classes arranged to best suit the student's needs.

ED 205 ADULT LITERACY: PROBLEMS AND ISSUES (3) Describes the problems, accomplishments and failures of adult literacy education in the United States as well as the changing social philosophy and its effect on legislation programs, methods, and materials of the past, present, and future. Local efforts and needs in adult basic education will also be investigated.

ED 210 FUNDAMENTALS OF VOCATIONAL EDUCATION (3) Organized in a competency based approach to provide a practical foundation for designing, organizing, and supervising classroom and shop learning activities. Includes videotaped review of microteaching lessons, strategies for evaluating and controling student performance, procedures for utilizing effective advisory committees and a thorough review of the ten approval factors which govern vocational-technical programs. Also covers theories and techniques of various instructional methodologies.

ED 211 TEACHING METHODS IN VOCATIONAL EDUCATION (6) Covers theories, techniques of instruction, use of audio visual equipment, preparing lesson plans for class or unit, and evaluation of student learning.

ED 212 MANAGEMENT OF THE VOCATIONAL EDUCATION ENVIRONMENT (3) Shop, academic, related classroom and cooperative placement sites; safety, priority population, developmental psychology with focus on adolescent psychology, learning styles, and disciplines.

ED 240 OCCUPATIONAL AND TRAINING INFORMATION (3) The study of the history of occupations, work classification, job families and job descriptions, current occupational information and the Dictionary of Occupational Titles.

ED 255 STUDENT EVALUATION IN THE SECONDARY SCHOOL (3) Appraisal of the development and significance of educational-measurements as they relate to the secondary school student. Emphasis on uses and limitations of classroom tests; analysis, interpretation and utilization of test results.

ED 256 CONTEMPORARY ISSUES IN SECONDARY EDUCATION (3) Analysis of major social forces affecting secondary education, including contemporary social, cultural, economic, and political issues. Exploration of various underlying educational policies.

ED 303 READING: GRADES K-6 (3) Philosophy and psychology of teaching reading at the K-6 level. Opportunities for planning, preparing, and teaching various aspects of a reading lesson. Areas covered include readiness, word recognition skills, word analysis skills, word meaning skills, reading in content areas, comprehension skills, and enrichment. Emphasis on diagnostic teaching and tailoring instruction to the individual. Currently used reading programs are analyzed and evaluated. Prerequisite: ED 319 or permission of instructor.

ED 304 READING AND CREATIVE WRITING FOR THE CLASSROOM TEACHER (3) Designed both to aid the teacher in his/her awareness of creative expression and to provide a better understanding of basic objectives, techniques and means of fostering creativity within the actual classroom. A wide variety of creative writing experiences will be explored, identified, and applied. Creating classroom climate conducive to creativity and establishing learning centers will also be major goals of this course.

ED 305 METHODS AND MATERIALS IN LANGUAGE ARTS K-6 (3) Concerned with those developmental activities that lead to skills and competencies in oral and written communication. Project and activities focus on the development of skills in speaking, listening, spelling, handwriting, grammar and punctuation. Projects also focus on the aesthetic activities which include poetry, creative dramatics, creative writing and choral verse. Lesson planning in the above activities and teaching mini-lessons are important practical features of this course. Prerequisite: ED 319 or permission of instructor.

ED 306 CURRICULUM DESIGN AND EVALUATION IN THE ELEMENTARY SCHOOL (3) A developmental view of the progress and conceptual structure of modern elementary school curriculum design and implementation. Consideration will be given to curriculum organization and the forces affecting it.

ED 307 PHILOSOPHY OF EDUCATION (3) Builds a knowledge of the tools of critical thinking which include an understanding of the uses and misuses of logic and language both in general and specifically applied to educational concepts, as well as an understanding of the major philosophical assumptions regarding the question; What is Man? posed by the representative philosophers who have had a major impact on American Education Practice.

ED 308 EARLY CHILDHOOD CURRICULUM (3) Curriculum and principles of early childhood education are identified for students through lectures supported by observations and demonstrations. Use of developmental and manipulative materials, music and art experiences, work and play periods and the development of language skills of the young child will be emphasized in the curriculum content.

ED 309 CHILDREN'S LITERATURE (3) This course is designed to provide teachers with a background of the major objectives and purposes for children's literature in today's classroom. Major emphasis will be given to a review of various types of children's literature, ways to share literature effectively with children, the use of media to encourage more reading, and to the establishment of library centers within the classroom setting. Areas of specialization such as award-winning books, key illustrators, poetry, and traditional literature will also be included.

ED 311 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3) Requires students to examine actively the basic principles underlying Social Studies. It requires that students become aware of unifying concepts and generalizations related to the realities of how people live and interact. Examination of traditional and current Social Studies projects is a matter of concern. Concurrently, production of materials and use of procedures promoting apt combinations of cognitive affective and psychomotor behaviors are expected.

ED 312 OUTDOOR EDUCATION: SEMINAR (3) The seminar will focus attention of local, state, federal authorities and their responsibilities for developing lands for public use. Participants will be expected to attend outdoor skill experiences and be able to relate them to classroom activities and school curriculum. In addition, students will be expected to examine areas of interest and prepare written materials for use in a classroom or outdoor setting. Resource consultants will be invited to express their views about environmental issues and concerns.

ED 314 SUPERVISED INTERNSHIP (3) Supervised by a master teacher and monitored by a college instructor. Demonstration of the application of pedagogical skills. Prerequisite: Completion of the four pre-internship vocational instructor approval courses.

ED 315 COMPARATIVE EDUCATION (3) Offers descriptive and analytical examination of differing educational systems both of developed and developing nations as existing in contemporary world society. The objective is for the student to ultimately achieve deeper understanding of the American education system and the relationship of the system to its culture and tradition.

ED 317 ANALYSIS AND CORRECTION OF READING DISABILITIES (3) Designed to acquaint students with the procedures, techniques, and materials used in diagnosing, prescribing, and remediating individual reading disabilities. Instruction in theoretical background is applied to actual cases with disabled readers. Prerequisite: ED 303 or permission of instructor.

ED 318 READING IN THE CONTENT AREAS (3) Approaches reading as a tool in the content areas of the curricula. All of the major subject matter areas will be explored. The general reading abilities involved in these areas as well as the specialized reading needs will be examined. The objectives, techniques, procedures, and material will be identified and utilized. Designed for teachers in the intermediate and secondary levels.

ED 319 PRINCIPLES OF TEACHING I (2) Designed to give students experience in writing objectives, lesson plans and questioning in the three domains cognitive, affective, psychomotor. In addition, students will learn different modes of teaching and what constitutes appropriate practices and sequence of instruction. Students will learn about and how to use various forms of audio visual media. Prerequisite: Junior status or permission of instructor.

ED 320 PRINCIPLES OF TEACHING II (2) Long range planning through units and learning centers will be the focus of learning. Through these, students will learn about recent classroom developments and the roles of grouping discipline and classroom management. Health and physical education as they relate to the elementary school population will be studied. Prerequisite: ED 319 or permission of instructor.

ED 322 PROGRAM DESIGN FOR THE TALENTED AND GIFTED (3) Examination of previously documented studies of gifted children. Exploration of needs of students, dimensions of curricula development and evaluation of the gifted.

ED 323 FIELD EXPERIENCE I (1) This is a pre-practicum to be taken concurrently with Principles of Teaching I. Students will apply the learnings and principles in a field setting. Students will use these opportunities to establish their competencies required for certification. Prerequisite: Junior status or permission of instructor.

ED 324 FIELD EXPERIENCE II (1) This is a pre-practicum to be taken concurrently with Principles of Teaching II. Students will apply the learnings and principles learned in a field experience setting. Students will use this opportunity to establish their competencies required for certification.

ED 326 LISTENING AS AN ASPECT OF READING (3) The purpose of this course is to acquaint the teacher with listening as a vital area of the total language arts program. Listening as one of the major tools in learning and communication is explored. The course concerns itself with the nature of listening; listening in the total curriculum; and creating an environment for effective listening development. The course will also provide opportunity to develop resource materials such as tapes and games which would be applicable to practical teaching situations.

ED 328 LITERATURE AT THE SECONDARY LEVEL (3) A survey of literature for grades 7 through 12. The contents of the course will include a brief history of the development of young adult literature, analysis of reading interest,evaluation of authors and publishers, guidance in student book selection, book talks and book lists. The course will require intensive reading and an analysis of literature for these grades.

ED 330 ORACY: CHILDREN'S SPEAKING AND LISTENING (3) This course is designed to promote familiarity with and ease in fostering creativity and language development. Attention will

be given to creating the climate for language growth, language and body expression, creative play and oral expression, beginning oral language activities, speech skills and teaching oral expression in natural situations. This process is thought to be a basis for children's subsequent learning to read.

ED 331 CREATIVE DRAMATICS IN A READING INSTRUCTIONAL PROGRAM (3) Deals with activities related to creative dramatics which can be integrated into literature and reading programs. Competence in using drama and in actual performance through assignments and projects that focus on creative dramatics, improvisations, role-playing, poetry, choral verse, and the adaptation of basal reader stories into play form.

ED 332 PSYCHOLOGY OF READING INSTRUCTION (3) Nature of reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability.

ED 333 READING CLINIC: A FIELD EXPERIENCE (3) Designed to give each student an in-depth clinical experience in diagnosing, prescribing, and remediating reading disabilities. Course participants will be required to define and manage a remedial program to ameliorate disabilities discovered through diagnostic procedures. Prerequisite: ED 303 & 317 or permission of instructor.

ED 334 WORD ANALYSIS SKILLS IN READING (3) Prospective reading teachers will acquire the skills of phonetic and structural analysis of words in order to teach independent word attack skills in reading. Designed to give each student experience in reading requirements and skills in teaching reading.

ED 335 INDIVIDUALIZED INSTRUCTION IN READING (3) Students study and develop techniques for implementing an individualized program in reading for the elementary grades. Included are methods of diagnosing and assessing levels of competency of children, procedures for working in an individualized program and methods of evaluating progress and keeping records. This course examines the values of various approaches to individualized instruction such as programming, performance contracting and media oriented learning centers. Prerequisite: ED 303 or permission of instructor.

ED 336 PRACTICUM EARLY CHILDHOOD K-3 (6) A minimum of 150 clock hours of supervised student teaching experience in grades K-3. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 337 PRACTICUM EARLY CHILDHOOD K-3 (6) A minimum of 150 clock hours of supervised student teaching experience in grades K-3. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 338 PRACTICUM: ELEMENTARY (1-6) (6) A minimum of 150 clock hours of supervised student teaching experience in grades 1-6. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 339 PRACTICUM: ELEMENTARY (1-6) (6) A minimum of 150 clock hours of supervised student teaching experience in grades 1-6. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 342 SUPERVISION OF VOCATIONAL SCHOOLS (3) Discussion of various aspects of the vocational school program including co-curricular activities, scheduling, fiscal procedures, legal responsibilities, public relations, systematic environment, and other areas of relationships and interaction. Emphasis will be placed upon the interdependence of the component parts of modern vocational schools.On-site visits to selected occupational schools, research projects (group and individual), and evening discussion panels with members representing various parts of a school system will be part of the course requirements.

ED 343 APPRAISAL AND EVALUATION TECHNIQUES IN OCCUPATIONAL EDUCATION (3) Appraisal of the development and significance of educational measurements as they relate to the vocational school student. Emphasis on uses and limitations of standardized tests; construction, validation and limitations of classroom tests; analysis, interpretation, and utilization of test results.

ED 345 LABOR LAWS RELATING TO OCCUPATIONAL EDUCATION (3) Designed to augment the participant's understanding of the legal environment affecting students. Emphasis will be on laws affecting all teachers as well as on particular aspects of law (Torts, Negligence, National Apprenticeship Rules, Chapter 707, State Legislation, etc.) that relate especially to the participants.

ED 347 PRINCIPLES AND PRACTICES OF OCCUPATIONAL GUIDANCE (3) The vocational guidance process in both the elementary and secondary public schools will be studied. Approaches

include counseling, group guidance and class instruction, the use of standardized tests and interest inventories, and cooperation with families, employers and other agencies. Phrased especially for Vocational Education Students.

ED 349 INTERPERSONAL RELATIONS AND CONFERENCE LEADERSHIP (3) An examination and analysis of interpersonal and group relations. An appraisal of the processes which produce greater self-awareness, heightened sensitivity to others, and improved human relations in classroom practice. Emphasis is placed upon learning to deal with individuals and groups with greater understanding and skill.

ED 350 ORGANIZATION OF EARLY CHILDHOOD SETTINGS (3) An introductory course in the organization and implementation of pre-school curriculum, i.e. private-public-Head Start and Montessori programs for the very young child. Significant topics included in the course are: characteristics and stages of development of the normal and special needs young child, the study of the learning theories appropriate to the readiness skills of the pre-schooler and the examination of the curriculum programs integrating subject matter, i.e. reading, communication (oral and written), art, music, math, science, health and physical education. Participants will be expected to prepare a learning kit or appropriate activities for the pre-schooler in three (3) skill areas.

ED 351 MOTIVATING THE RELUCTANT READER (3) Provides the teacher with an over-view of the developmental reading stages and the types of reluctant readers which can be found at each stage. The course further explores innovative approaches which can be used to produce an enthusiastic reader. The teacher has the opportunity to investigate in depth such areas as: oral reading as a motivational technique, develop reading leadership plans, behavior modification techniques, peer motivation and teaching, attitudinal surveys and non-traditional reading materials. Opportunity to implement some of these techniques and plans will be provided.

ED 356 TEACHING AND LEARNING (3) Preparation for direct experience at the secondary level. In-depth study of: the value of educational principles viewed empirically, basic needs of secondary school students, determinants of attitude and motivation in relation to the secondary school student's immediate and long-range goals, general and specific teaching methods. Emphasis on flexibility in selection and utilization of teaching methods. Interdepartmental team teaching to include large groups, small groups, and individualized instruction. Pre-student teaching classroom observation and clinical experience will be required. Prerequisite: ED 155.

ED 357 HISTORICAL FOUNDATIONS OF EDUCATION (3) Discussion of the American school from the colonial era to the present its ideas, movements, intentions and goals in the context of other social movements. The course is designed to increase the student's ability both in evaluation of current educational problems and in educational policy making. Emphasis will be placed upon the historical development of the American secondary school and upon meeting the needs of American society.

ED 359 THE MIDDLE SCHOOL (3) An exploration of the ideas which underlie the conception, development, purposes, organization, and curricula of the middle school. Instruction and guidance functions will be considered in relation to the needs and characteristics of young adolescents.

ED 360 COMMUNITY SERVICE PLACEMENT (6) Involves eight or sixteen weeks of field work experience in selected area agencies. The work is related to the occupational interests of the student but does not lead toward teacher certification. Placement provides an opportunity for the student to apply, test, evaluate and integrate in a responsible professional activity the knowledge, attitudes and skills he/she has learned in the classroom.

ED 361 TEACHING READING IN THE SECONDARY SCHOOL (3) The psychology of the reading process will be presented through application of basic reading concepts at the secondary level. Participants will examine the process of word recognition, word study skills, evaluation within reading, and rate and comprehension. Concurrently, students will examine developmental reading programs and will apply procedures and techniques for teaching reading in various subject matter areas.

ED 362 CURRICULUM DESIGN AND EVALUATION IN THE SECONDARY SCHOOL (3) An analysis of curriculum design and evaluation techniques resulting in the actual design of secondary curriculum. The role of teachers, administrators and other groups influencing curriculum will be reviewed.

ED 363 METHODS AND MATERIALS IN DRIVER EDUCATION (3) Examination of teaching methods and materials used in the instruction of both non-licensed and licensed drivers seeking additional proficiency. Particular emphasis will be placed upon psychological and attitudinal problems of driver behavior. The course will include lectures, seminars,

individual and group presentations, guest lectures, audio-visual material and on-the-road instruction.

ED 364 PRACTICA: MIDDLE SCHOOL (12) A minimum of three hundred clock hours of supervised student teaching in a selected middle school under the joint supervision of an experienced cooperating practitioner and college supervisor.

ED 367 IDENTIFICATION, ASSESSMENT, PLACEMENT, AND PROGRAMMING IN SPECIAL EDUCATION (Severe) (4) Curriculum resources, methods and materials for children with severe special needs are developed on the basis of on-going diagnosis.

ED 368 IDENTIFICATION, ASSESSMENT, PLACEMENT AND PROGRAMMING IN SPECIAL EDUCATION (Young Child Special Needs) (4) Curriculum resources, methods and materials for young children (ages 3-7) with special needs are developed on the basis of on-going diagnosis.

ED 369 PRACTICA: SECONDARY SCHOOL (12) A minimum of three hundred clock hours of supervised student teaching in a selected secondary school under the joint supervision of an experienced cooperating practitioner and college supervisor.

ED 370 SPEECH AND LANGUAGE PROBLEMS OF THE SPECIAL NEEDS CHILD (3) Normal Speech and Language expectancies, problems of the special needs child in language acquisition, speech and hearing mechanisms. Speech and language pathologies, their incidence and etiology, Regulations of "766" and "94-142" regarding speech and language habilitation of difficulties.

ED 371 IDENTIFICATION, ASSESSMENT, PLACEMENT AND PROGRAMMING IN SPECIAL EDUCATION (Moderate) (4) Curriculum resources, methods and materials for children with moderate special needs are developed on the basis of on-going diagnosis.

ED 372 DIAGNOSTIC TECHNIQUES IN SPECIAL EDUCATION (3) This course is directed to all teachers of children with serious learning problems. The nature of this course is threefold; to develop competence in formal and informal assessment and diagnosis; in writing clear concise reports of test results, observations, interpretations, conclusion and prescriptive program; and in communicating results to professional and para-professional staff or as a member of a core evaluation. Attention is focused on both formal and informal diagnostic techniques to assess behavior and development in the basic skills of: reading, arithmetic, perceptual-motor (gross and fine), speech and language, writing and personal-social domains.

ED 373 CLINICAL EXPERIENCE (Moderate) (3) Advanced students are offered guided practicum experiences in selected schools for application of the theoretical foundations of the diagnostic-prescription approach to teaching pupils with moderate special needs. Each student is required to prepare an I.E.P. for a special needs pupil.

ED 374 CAREER EDUCATION FOR STUDENTS WITH SPECIAL NEEDS (3) Non-academic activities that contribute toward the improvement of self-concept and pre-vocational experiences for exceptional children. The selection of relevant activities will be based upon the assessment of individual needs as well as the content and process of various "careers".

ED 375 COMPREHENSIVE SERVICES IN SPECIAL EDUCATION (3) Home, school and community influences are analyzed in family adjustment to the presence of a handicapped child. Family reactions are considered in behavioral differences among the children with various degrees of disability. Emphasis is given to guidance skills and knowledge needed by teachers and other professional workers in the field of Special Education.

ED 376 DEVELOPMENTAL DISABILITIES (3) A developmental disability is a delay or failure to progress through the normal developmental milestones of childhood. The purpose of this course is to explore educational, social and legal issues that affect the opportunities of developmentally disabled individuals. Educational assessment and programming will focus on the developmental domains of motor, psycho-social, communication, cognitive functioning. A continuum of educational and community options will be described in order to acquaint the student with the least restrictive options needed to promote the growth of the developmentally disabled.

ED 377 STUDENTS WITH SPECIFIC LEARNING PROBLEMS (3) Introduction to the history and current practices in the diagnosis and remediation of learning disabilities, major theories of etiology, commonly used assessment instruments, and remedial materials and methods. Research findings, issues and controversies in the field will be discussed.

ED 378 STUDENTS WITH SPECIAL BEHAVIORAL/EMOTIONAL NEEDS (3) Psycho-educational assessment, identification, choice of intervention and management of children with special needs; behavioral difficulties, are main areas of study. The home, school, and community are considered in relation to the child's mental health.

ED 379 SPECIAL PROGRAM METHODS: BEHAVIOR DIFFICULTIES (3) Programs, methods curriculum and materials used in the education of the child with emotional or behavioral problems will be evaluated, both from the viewpoint of selecting appropriate learning experiences according to children's needs, as well as an examination of school curriculum as an influence on learning and behavior problems. The expanding role of the teachers will also be considered.

ED 380 THE DISADVANTAGED CHILD (3) Discussion of children from various ethnic, cultural, and linguistic backgrounds in terms of their physical, social, emotional, economic, psychological and educational needs. Emphasis placed on causal factors as well as factors affecting successful educational practice.

ED 381 EARLY INTERVENTION FOR YOUNG CHILDREN WITH SPECIAL NEEDS (3) The purpose of this course is to help students to gain an awareness of how early identification of handicapping or potentially handicapping conditions, along with appropriate remediation measures, can be the most beneficial way to help children to develop. The course will be divided into four main areas of study: Rationale, for early intervention and related legislation; Research; Casefind, Screening and Diagnosis; and intervention Strategies and Programs. Although the amount of the time spent in each area of study may vary, each area is of great importance in developing an understanding of the field.

ED 382 CLINICAL EXPERIENCE IN SPECIAL EDUCATION YOUNG CHILD (3) Advanced students are offered guided practicum experiences in selected schools, for application of the theoretical foundations of the diagnostic-prescription approach to teaching young children with special needs. Each student is required to prepare an I.E.P. for a special needs child (ages 3-7 years).

ED 385 DEVELOPING AND ADMINISTERING COMMUNITY BASED RESOURCES (3) Focuses upon the procedures and programs needed for providing an easier transition along the continuum (from institutions to independence) for handicapped individuals. Various options for living, working and schooling are discussed. This course stresses the development and management of resources that aid in "communitization".

ED 386 EDUCATION AND TRAINING OF THE SUBSTANTIALLY HANDICAPPED CHILD (3) This course is a systematic study of neurophysiological deviations that cause severe disabilities. Emphasis is also placed on method and techniques for increasing motivation and improving performance. Students will develop an understanding of concepts and procedures necessary to write cooperatively with medical professionals, physical therapists, occupation therapists, communication specialists and parents.

ED 387 CLINICAL EXPERIENCE IN SPECIAL EDUCATION SEVERE (3) Advanced students are offered guided practicum experiences in selected clinics or agencies and residential institutions, for application of the theoretical foundations of the diagnostic-prescription approach to teaching pupils with severe special needs. Each student is required to prepare an I.E.P. for a severe special needs individual.

ED 388 PRACTICUM: YOUNG CHILD WITH SPECIAL NEEDS (6-12) A minimum of 300 clock hours (12 cr.) of supervised student teaching experience in an approved setting for young children with special needs.

ED 389 PRACTICUM: SEVERE SPECIAL NEEDS (6-12) A minimum of 300 clock hours (12 cr.) of supervised student teaching experience in an approved setting for students in severe special needs.

ED 395 CLINICAL EXPERIENCE IN READING (3) Advanced clinical opportunities to work with pupils/students, individually and in small groups, in corrective reading instruction, remedial reading instruction, and developmental reading instruction at various settings.

ED 396 SEMINAR RECENT DEVELOPMENTS: COMPUTERS IN EDUCATION (3) This course requires no previous experience with computers and will be comprised of three major components: (a) an introduction to software tools for teachers, (b) exposure to and analysis of commercially available educational software and hardware, (c) an analysis of both practical and theoretical issues related to the use of microcomputers in education.

ED 397 PRACTICUM: MODERATE SPECIAL NEEDS (6) A minimum of 150 clock hours of supervised. student teaching experiences with students having moderate special needs.

ED 399 INDEPENDENT STUDY (3-9) Education majors are allowed to receive up to a maximum of nine academic credits, at the rate of three credits per semester, or engaging in independent study. Each study is taken as a part of a student's regular course load only. The student engaged in independent study will select and develop topics in the field of Education and related fields in cooperation with a professor from the Education Department, and the approval of the chair.

ENGLISH

English majors may choose from four distinct concentrations, each leading to a Bachelor of Arts degree: Communications, Journalism, Literature, and Theatre. Non-majors may also include in their programs one or more of the department's five minors: Communications, Journalism, Literature, Theatre, and Writing. Department courses afford opportunities for developing the crucial verbal skills of analysis, synthesis, comprehensive and critical reading, extended and incisive writing, and clear thinking. In addition, English study provides, through rigorous analysis of major literary works, a unique experience in recognizing, evaluating, and articulating human values, motives, and qualities.

Westfield State College offers students of English a fully equipped professional theater, access to the campus television and radio station, a weekly college newspaper staffed chiefly by journalism students, the latest word processing equipment, and a literary magazine publishing outstanding student writing. A Writing Coordinator offers seminars and individualized self-help exercises. A popular and successful feature in the department is its internship program through which students gain valuable on-the-job experience with television and radio stations, newspapers, a professional theater, social services agencies, and regional offices of national corporations.

Recent graduates majoring in English have accepted positions as teachers, reporters and editors, television staff members, theater directors, and corporate public relations officers. Some graduates have entered management training programs; others have gone on to graduate or professional schools.

FOR ALL ENGLISH MAJORS

1. English. A minimum of 39 credits
2. Foreign language. Completion of at least two college semesters of one foreign language, unless in high school the student has (a) completed three years of study of one foreign language, or (b) completed two years of study in each of two foreign languages. A student may also satisfy the foreign language requirement by passing a proficiency examination designed and administered either nationally or locally.

REQUIREMENTS FOR LITERATURE CONCENTRATION

The following courses are required of English majors, if they concentrate in Literature.
1. EN 210, English Literature I , and either EN 211, English Literature II or EN 212, English Literature III (6).
2. EN 216, Nineteenth-Century American Literature and EN 217, Modern American Literature (6).
3. EN 317, Shakespeare I (3).
4. One course in a major figure or period (3).
5. EN 348, History of the English Language, or EN 349, Structure of Modern English (3).
6. EN 300, Development of the Novel (3).
7. A 300-level writing course (3).

The remaining 12 hours of electives are chosen from 300-level English courses; World Literature I and II (EN 221-222) and either English Literature II or III whichever is not taken as a requirement, are the only 200-level courses that count as electives toward the major.

REQUIREMENTS FOR TEACHING ENGLISH IN MIDDLE AND SECONDARY SCHOOLS

Those who wish to teach English in middle or secondary schools follow the Literature concentration. They are required to take EN 106 Principles of Grammar, EN 221 World Literature I, and EN 351 Methods of Teaching English. They are also required to complete a professional education sequence. EN 338 Literature and the Adolescent is recommended as an elective.

To be recommended for the teaching practicum, students must have a 2.70 cumulative quality point average in the major.

REQUIREMENTS FOR COMMUNICATIONS CONCENTRATION

Those students who pursue a Communications concentration must meet the general requirements for all English majors, including English Literature I and II or III, Nineteenth-Century American Literature and Modern American Literature, Structure of Modern English or History of the English Language, and two 300-level English courses.

The remaining 18 credits (for a total of 39) may be selected from the following courses, with at least 2 courses chosen from each of the 3 major headings.

Critical Communication:
EN 367 Film Theory and Criticism (3)
EN 381 Television Drama (3)
EN 391 Special Studies in Film (3)
EN 393 History and Development of the Motion Picture (3)

Written Communication:
EN 346 Creative Writing (3)
EN 374 Journalism I (3)
EN 378 Writing for TV (3)
EN 388 Special Topics in Writing (3)
EN 392 Business and Technical Writing (3)

Oral Communication:
EN 103 Speech (3)
EN 250 Oral Interpretation (3)
EN 395 Speaking on Radio and TV (3)

EN 380 Practicum in English (3-12 credits) is also available to juniors and seniors who wish to gain some career experience through an internship and earn some additional degree credit at the same time.

REQUIREMENTS FOR THEATRE CONCENTRATION

This concentration serves as preparation for those students who wish to prepare for a career in either professional or educational theatre. Students concentrating in Theatre must complete at least 39 hours in Theatre Arts courses. Required courses are:

EN 225 Theatre Arts (3)
EN 317 Shakespeare I (3)
EN 352 Acting I (3)
EN 353 Theatre Workshop (6)
EN 354 Vocal Techniques for the Stage (3)
EN 355 Directing I (3)
EN 357 Acting II (3)
EN 365 Dramatic Criticism (3)
EN 366 Dramatic Literature (3)
EN 369 History of the Theatre (3)

Electives: (a minimum of 2 courses from among the following)
[EN 380 and EN 399 are offered only after minimum electives have been completed.]

EN 318 Shakespeare II (3)
EN 321 Irish Theatre (3)
EN 336 Contemporary Trends in Dramatic Literature (3)
EN 356 Stagecraft and Design (3)
EN 362 Research Seminar in Theatre (3)
EN 364 American Drama (3)
EN 368 Directing II (3)
EN 370 Modern Drama (3)
EN 371 Playwriting (3)
EN 380 Practicum Internship (3-12)
EN 399 Independent Study (3)

REQUIREMENTS FOR THE JOURNALISM CONCENTRATION

Those students who elect the Journalism concentration must meet the general requirements for all English majors and complete the following required courses: English Literature I and II or III, Nineteenth-century American Literature, Modern American Literature, History of the English Language OR Structure of Modern English, and two 300 level English courses.

The remaining 24 credits (for a total of 39) are to be chosen from the following:
Required (15)

EN 231 History of Journalism (3)
EN 374 Journalism I (3)
EN 375 Journalism II (3)
EN 377 Feature Writing (3)
EN 394 News Editing (3)

Electives: (students choose 9 hours from the following courses)

EN 347 Advanced Writing Techniques (3)
EN 378 Writing for Television (3)
EN 379 News Media Seminar (senior year only) (3)
EN 383 Critical Writing in Journalism (3)
EN 384 Special Topics in Journalism (3)
EN 392 Business and Technical Writing (3)
EN 395 Speaking on Radio and Television (3)
MS 202 Introduction to Photography (3)
MS 301 Introduction to Television Production (3)
MS 309 Broadcast Journalism (3)

Students following the Journalism concentration must also join the staff of The Owl, the college newspaper, and participate in its activities for at least four semesters.

REQUIREMENTS FOR THE JOURNALISM MINOR

Students who wish to minor in journalism must have a minimum of C+ in EN 101-102 (Composition I & II). Minors should also join the staff of The Owl and participate in its activities for at least four semesters (transfer students see the Chair).

Students must take 18 hours from following courses to complete the minor:

EN 231 History of Journalism (required) (3)
EN 374 Journalism I (required) (3)
EN 375 Journalism II (required) (3)
EN 345 Advanced Writing Techniques (3)
EN 377 Feature Writing (3)
EN 378 Writing for Television (3)
EN 379 News Media Seminar (senior year only) (3)
EN 380 Practicum in English (3-12 credits, senior year only)
EN 383 Critical Writing in Journalism (3)
EN 384 Special Topics in Journalism (3)
EN 392 Business and Technical Writing (3)
EN 394 News Editing (3)
EN 395 Speaking on Radio and Television (3)
MS 202 Introduction to Photography (3)
MS 301 Introduction to Television Production (3)
MS 309 Broadcast Journalism (3)

REQUIREMENTS FOR THE LITERATURE MINOR

Students take 18 credits made up of the following courses:

EN 210 English Literature I (required) (3)
EN 211 English Literature II or EN 212 English Literature III (required) (3)
EN 216 Nineteenth-Century American Literature (required) (3)
EN 217 Modern American Literature (required) (3)

and two of the following;

EN 211 English Literature II or EN 212 English Literature III (3)
(whichever is not taken as a requirement)
EN 221 World Literature I (3)
EN 222 World Literature II (3)
EN 317 Shakespeare I (3)
Any 300-level writing course (3)

REQUIREMENTS FOR THE THEATRE MINOR

EN 353 Theatre Workshop (6). To be taken after any 12 credits offered under "Requirements for Theatre Concentration."

REQUIREMENTS FOR THE COMMUNICATIONS MINOR
(18 credits from the following courses with two courses chosen from each category)

Critical Communication
EN 381 Television Drama (3)
EN 367 Film Theory and Criticism (3)
EN 393 History and Development of Motion Pictures (3)
EN 391 Special Studies in Film (3)

Written Communication
EN 346 Creative Writing (3)

EN 374 Journalism I (3)
EN 378 Writing for Television (3)
EN 388 Special Topics in Writing (3)
EN 392 Business and Technical Writing (3)

Oral Communication
EN 103 Speech (3)
EN 250 Oral Interpretation (3)
EN 395 Speaking on Radio and Television (3)

REQUIREMENTS FOR THE WRITING MINOR
(18 credits from the following recommended courses, not necessarily in sequence)
Prerequisite: C+ or better in both EN 101-102, English Comp I & II.

EN 347 Advanced Writing Techniques (3)
EN 374 Journalism I (3)
EN 377 Feature Writing (3)
EN 378 Writing for Television (3)
EN 392 Business and Technical Writing (3)

and any one of the following:

EN 346 Creative Writing (3)
EN 371 Playwriting (3)
EN 375 Journalism II (Prereq. EN 374) (3)
EN 388 Special Topics in Writing (3)

PRACTICUM

Of special interest to English majors is the Practicum in English, EN 380. Through the Practicum, students can earn 3-12 college credits for on or off-campus work experience. Such experiences are often the beginning of lifetime vocational decisions.

COURSES

EN 100 LEARNING ENGLISH AS A SECOND LANGUAGE (0) Designed to teach English language skills to students whose native language is not English. A thorough study is made of the American English sound system, sentence patterns, vocabulary, transforms, and modification. In addition, students will have an opportunity to study American culture through language habits.

EN 101 & 102 ENGLISH COMPOSITION I & II (6) An intensive course in writing. In the Fall semester fundamentals of writing are stressed, including rhetoric, sentence structure, paragraph development and the writing of complete essays. An introduction to literature comes in the Spring semester during which the various types of fiction, drama and poetry are studied. Emphasis is on writing essays taken from literature. The techniques of the research paper are studied and a research paper is required. Successful completion of this course is a prerequisite for all other English courses offered.

EN 103 SPEECH (3) A course that gives students an opportunity to practice the fundamental principles of oral communication. It includes experience in organizing and delivering various kinds of talks, participating in group and panel discussions,and evaluating speech habits. Voice quality, articulation and pronunciation are studied.

104 INTRODUCTION TO THE THEATRE (3) Acquaints interested students with the origins and nature of drama, dramatic literature and, in general, with major historical periods of Western theatre. Moreover, the theory and practice of the theatre arts of playwriting, acting, directing, set and lighting design, theatre architecture, costuming and makeup, technical production and theatre management will be studied and considered in the light of their creative and cultural impact on playgoers and playreaders, past and present.

EN 105 FRESHMAN ENGLISH SEMINAR (HONORS) (3) Designed as an EN 101 substitute for freshmen with high verbal ability and well-developed writing skills. Emphasis is on analysis and writing of thematically organized assignments with complexities well beyond those usually considered in EN 101.

EN 106 PRINCIPLES OF GRAMMAR (1) Designed for, but not limited to, students who have completed English Composition I but who need or want better understanding of, and improvement in, grammar, usage, and mechanics. Reviews standard English principles and practice in fundamental areas such as sentence types and structure, clauses, pronouns, punctuation, verb tense and agreement. Meets 75 minutes twice each week for 8 weeks.

EN 110 ENGLISH COMPOSITION II (Honors) (3) Designed as a substitute for EN 102 for students who have satisfactorily completed EN 105 or shown marked ability in EN 101. Focus on the critical and appreciative reading of fiction, poetry, and drama and on interpretive and analytical writing about literature at a level beyond that in EN 102. Techniques of research are discussed and practiced.

EN 200 WRITING WORKSHOP (1-3) Designed for students in all majors, the workshop will develop skills in rhetorical techniques and provide practice in specific types of expository writing appropriate to many disciplines.

EN 203 EFFECTIVE WRITING FOR BUSINESS (3) Designed to teach the fundamentals of writing for business. The form, structure, and content of resumes, business correspondence, analyses, reports, proposals, etc., will be covered with emphasis on the use of clear, concise, accurate language, free from jargon. Students will compile and retain a portfolio of business writing samples. Prerequisite: EN 102.

EN 210 ENGLISH LITERATURE I (3) English literature from Beowulf through Shakespeare. The chronological development of English literature will be stressed. ** Required of all English majors except those concentrating in theatre.

EN 211 ENGLISH LITERATURE II (3) English literature from the early 17th century to the late 18th century (1780). The chronological development of English literature will be stressed.

EN 212 ENGLISH LITERATURE III (3) English literature from the Romantics (1780) to the 20th century. The chronological development of English literature will be stressed.

EN 213 MAJOR BRITISH WRITERS (3) Designed for non-English majors, the course consists of a study of the most prominent writers of English literature through representative selections.

EN 215 MAJOR AMERICAN WRITERS (3) Designed for non-English majors, the course consists of a study of the most prominent writers of American literature through representative selections.

EN 216 19TH CENTURY AMERICAN LITERATURE (3) Surveys the major figures of the century from Poe to James. Attention is directed toward the cultural and historical context of our literature. Required of all English majors except those concentrating in Theatre.

EN 217 MODERN AMERICAN LITERATURE (3) A Study of 20th century American literature in the light of significant social and literary trends. Featured are major authors from Dreiser to the present. Required of all English majors except those concentrating in Theatre.

EN 221 WORLD LITERATURE I (3) A comparative study of literature in the Western world presented through lectures and the reading and discussion of masterpieces in translation. Included are works by such writers as Plato, Homer, the Greek dramatists, Virgil, and Cervantes. Required of English majors preparing to teach.

EN 222 WORLD LITERATURE II (3) A continuation of EN 221 featuring outstanding works in translation. Representative writers included may be Rousseau, Goethe, Balzac, Flaubert, Dostoevsky, Rimbaud, Gide, and others.

EN 223 THE BIBLE AS LITERATURE (3) An examination of the Bible's legends, folk tales, songs, and historical narratives in relation to classical mythology as seminal ideas and themes in English literature.

EN 224 BLACK AMERICAN LITERATURE (3) Critical study of the Black in American Literature from two vantage points: the new image of the black in the works of major American writers, and the image of the Black and of Americans in work created by American Black writers.

EN 225 THE SHORT STORY (3) Extensive readings of short stories of various periods representing different countries. Special attention is given to the theme and form of each story.

EN 226 LITERATURE BY AND ABOUT WOMEN (3) A consideration of literary works (in different genres and from different eras) which include stereotyped images of women. The course will examine writings by both male and female authors in an attempt to compare or contrast disparate visions of the woman in life roles.

EN 227 CONTEMPORARY LITERATURE (3) A study of various types of international literature since World War II and the influence of the period on such literature. Plays, different forms of fiction, and poetry are read and discussed.

EN 228 INTRODUCTION TO SHAKESPEARE (3) Designed for students who are not majoring in English, this course provides a basic knowledge of Shakespeare's dramatic forms, poetry, characterization, theatrical method, and insight into human nature. No student may receive credit for this course if credit is received for either EN 317 (Shakespeare I) or EN 318 (Shakespeare II).

EN 229 SCIENCE FICTION (3) Science fiction works of the 19th and 20th centuries, with emphasis on more current works. The study of the literature is augmented by study of the influences from science and the general culture. Science fiction will be studied as a literary form and in relation to the peculiar issues and themes which it raises.

EN 230 JEWISH-AMERICAN WRITERS (3) A study of Jewish-American writers with special focus on the immigrant experience, the response to the Holocaust, and the problems of assimilation and identity. Readings will include representative works by Abraham Cahan, Henry Roth, Philip Roth, Bernard Malamud, Saul Bellow, Irwin Shaw, Chaim Potok, and others. In addition to reading literary works, students will consult appropriate sources dealing with religious, social, and historical backgrounds.

EN 250 ORAL INTERPRETATION (3) Geared towards aiding those students interested in broadcasting, acting, or teaching careers. In an informal group setting, the student will pursue the heightening and sharing of his/her sensitivities in relation to a wide choice of written materials including drama, children's literature, documentaries, fiction, editorials, scripts, and poetry. At the same time, the course will concentrate on using and developing the full range of the voice as the vehicle to communicate the student's sensitivities and interpretations.

EN 251 THEATRE ARTS (3) Designed to give the student a better understanding of the art of the theatre as a medium of culture. Students will become acquainted with lighting for the stage, costume and stage design, and make-up. As a part of the course, students will have an opportunity to gain first-hand experience in working in play productions by participating in them.

EN 252 THEATRE PRACTICE (1 transcript credit) Designed specifically for those students who will take part in the major production of the semester, non-theatre minors included. As actors, stagehands or those participating in costume, scenic design or lighting, their work will be evaluated by the director of the production.

EN 300 DEVELOPMENT OF THE NOVEL (3) A study of the novel as a literary form from the eighteenth century to the present. Emphasis will be on the shaping influences of the English novel of the 18th and 19th centuries. Among the works which may be included are those of Richardson, Fielding, Sterne, Austen, Eliot, Dickens, and Hardy. Twentieth-century innovations in the form will be considered through such writers as Joyce, Lawrence, and Faulkner. Novel theorists such as Flaubert, James, and Ortega will also be included.

EN 310 THE IRISH IN LITERATURE (3) A study of selected works by Irish writers primarily of the 19th and 20th centuries. Some consideration will be given as well to important earlier works which contribute to the Irish literary tradition. The works will be examined in a sociological and cultural light in an attempt to identify those elements of Irish life which stirred the imagination of that nation's writers. Throughout the course emphasis will be placed on the reading of a wide variety of primary sources.

EN 311 THE BRITISH NOVEL (3) A study of the development of the novel as a genre, its literary origins and its relationship to society. Readings begin with 18th-century novelists such as Defoe, Richardson, Fielding, Smollett, and Sterne and continue with 19th-century representatives: Austen, Dickens, Eliot, Hardy, and Conrad.

EN 313 MEDIEVAL ENGLISH LITERATURE (3) A study of the outstanding English literature of the 12th, 13th, 14th, and 15th centuries (excluding Chaucer). Poems, dramas, sermons, and other prose works will be studied in the perspective of literary and historical traditions.

EN 314 MILTON (3) A study of the man and his works including Paradise Lost and selected poetry and prose.

EN 315 17th CENTURY ENGLISH LITERATURE (3) Literature of this period from Donne and Jacobean drama to Marvell and Dryden.

EN 317 SHAKESPEARE I (3) A study of the tragedies and early comedies of Shakespeare including some consideration of his sources, his use of Elizabethan ideas, and his theatre.

EN 318 SHAKESPEARE II (3) A study of the historical plays and later comedies.

EN 319 VICTORIAN LITERATURE (3) A study of literary responses to the impact of industrialism, science and modernism upon England's society and culture between 1830 and 1900. Readings include: Carlyle, Ruskin, Newman, Mill, Tennyson, Browning, Arnold, Dickens, Eliot.

EN 320 CHAUCER (3) Readings will include The Canterbury Tales and other selected works, with as much attention to Middle English as is necessary for an understanding of the texts.

EN 321 IRISH THEATRE (3) A course in the development of modern Irish theatre from its origins at the turn of the 20th century to the present. The plays and artistic credos of Yeats, Shaw, Lady Gregory, Synge, O'Casey and Behan will be studied in addition to the representative works of other important Irish dramatists.

EN 323 THE AMERICAN NOVEL (3) At least one major work of fiction of a selected group of American novelists beginning with those of the mid-nineteenth century and including others to the present day.

EN 324 MODERN POLITICAL NOVEL (3) A study of the development, in English and American literature since 1865, of the novel as a medium for discussing and influencing political theories and movements. Elements such as propaganda, sentimentality, and oversimplification of issues will be stressed. Authors to be considered may include Dickens, Disraeli, George Eliot, H. G. Wells, Henry Adams, de Forrest, Twain, Drury, O'Connor, and Robert Penn Warren.

EN 325 AMERICAN FICTION: THE ROMANTIC AND THE GOTHIC (3) Surveys 19th and 20th century American works which explore unusual experiences and heightened state of consciousness and show a fascination with the mysterious, the magical, and the melodramatic. Writers to be considered may include Charles Brockden Brown, Poe, Hawthorne, Melville, James, Lovecraft, Faulkner, Flannery O'Connor, and Vonnegut.

EN 332 ROMANTIC LITERATURE (3) A study of the prose and poetry of the major writers of the Romantic Age.

EN 333 REPRESENTATIVE EUROPEAN NOVELISTS (3) To acquaint advanced students of literature with novelistic approaches to modern European literature, placing special emphasis on the representative writings of such significant authors as Joyce, Mann, Kafka, Camus, Gide and others. Study will include structural and stylistic analyses.

EN 337 EUROPE AND WESTERN LITERATURE (FIELD STUDY) (3) A course designed to make the best use of firsthand experiences of the cultural legacy of Western Europe (performing arts, museums, historical sites, etc.) as a means of gaining further insight into the values, meanings, and styles of major literary works in Western literature. Students will combine a two- or three-week period of organized and supervised travel in Europe with subsequent attendance at seminars and development of papers to articulate their newly acquired understanding of particular literary works.

EN 338 LITERATURE AND THE ADOLESCENT (3) A detailed examination of the teaching of literature in the junior and senior high school, with emphasis on literature written expressly for adolescents. Attention will also be given to related matters: (1) the objectives and functions of literature study interspersed and in the entire school program; (2) a pedagogical approach to major genres; (3) new approaches to literature study; (4) methods of teaching reading. In short, this course ought to aid teachers who wish to improve the way they teach literature to their students.

EN 339 LITERATURE OF THE 18TH CENTURY (3) Students will study Dryden, Johnson, Pope, Swift, and other major writers of the century.

EN 341 SEMINAR IN MAJOR BRITISH AND AMERICAN AUTHORS (3) A study of significant works by major literary figures. Each seminar will feature the works of one or two literary figures. The names of the figures will be announced in advance of the seminar and will be included in the course title.

EN 342 RESEARCH SEMINAR IN ENGLISH (6) Advanced work in English which will include guided individual study of an approved topic, and the reading of a prescribed list of books. Members of the department will assist those students whose special interests coincide with the specialized area of the instructors. Students must have the approval of the Department Chair to take this course.

EN 344 STUDIES IN SATIRE (3) A study of the development of English satire to the present, examining its gradual and skillful integration of three basic elements: invective,

burlesque, and irony. To avoid simplistic judgments, the course will include readings in both theory and practice.

EN 346 CREATIVE WRITING (3) For qualified students interested in identifying and developing their special writing abilities. The techniques of writing fiction, drama, and verse will be studied.

EN 347 ADVANCED WRITING TECHNIQUES (3) Designed to develop formal writing ability on scholarly topics. Intensive library research will precede all writings. The goal of the course is to provide students with the research and writing skills necessary in the preparation of papers of publishable quality. Non-English majors will be encouraged to select subjects related to their fields of study.

EN 348 HISTORY OF THE ENGLISH LANGUAGE (3) A study of the development of English from its Indo-European origins to the present day, including an historical survey of changes in structure, sounds, and meaning.

EN 349 THE STRUCTURE OF MODERN ENGLISH (3) A study of the origin and development of the English language with emphasis on its present structure and usage.

EN 351 METHODS OF TEACHING ENGLISH (3) Preparation for teaching English in middle and secondary schools through the following: study and observation of school structures, procedures, and teaching techniques; evaluation and selection of appropriate material for students at middle and secondary levels; preparation of lesson plans, presentation of lessons, construction of tests, and evaluation of student writing. Prerequisite: 24 credits in the major.

EN 352 ACTING I (3) An introductory course in the art and craft of the actor designed to make the student aware of personal outer and inner resources and to provide the student with work habits and tools to approach the actor's task with understanding.

EN 353 THEATRE WORKSHOP (6) A six-credit course consisting of theory and practice as well as seminars in acting, directing and theatre arts. In addition, participants will perform in six one-act plays, each of which will be staged at the college theatre.

EN 354 VOCAL TECHNIQUES FOR THE STAGE (3) Fundamentals of learning effective vocal production for the theatre, with special emphasis in areas of interpretation and character analysis, clarity and quality of voice for performance. Prerequisite: EN 251.

EN 355 DIRECTING I (3) A study of the process of play direction. Styles and techniques in directing will be emphasized with practice in the staging of scenes from representative plays. Prerequisite: EN 251 and EN 352.

EN 356 STAGECRAFT AND DESIGN (3) Consists of a study of the visual elements of theatre, the theories of stage design, color and line, and the building and painting of scenery. Consideration will also be given problems of lighting and make-up and their relationship to play production. An extension of Theatre Arts, but dealing more with theory. Prerequisite: EN 251.

EN 357 ACTING II (3) Working on a role. The creation of simple reality through listening, talking, body and voice control, and character justification as applied to actual texts; breakdown of the inner action and visual score of the role, including exercises and experiments in imagery and rhythm. Scenes and one-act plays will be presented in class for analysis and criticism. Prerequisite: EN 352.

EN 362 RESEARCH SEMINAR IN THEATRE (3) Advanced research in theatre and mass communications, which will include guided individual study of an approved topic of research in theatre and mass communications. Members of the department will assist and guide those students whose special interests coincide with the specialized areas of the instructors. Prerequisite: Departmental approval.

EN 364 AMERICAN DRAMA (3) Emphasis on the development of the dramatic form in America. Plays that are read and discussed demonstrate that there is a native American dramatic tradition and that experimentation is one of its characteristics. The plays also reflect significant development in and through culture.

EN 365 DRAMATIC CRITICISM (3) A study of historic and present day criticism of plays and movements in theatre. Attention will be given to theories of drama and playwriting. Prerequisite: EN 366.

EN 366 DRAMATIC LITERATURE (3) A critical evaluation of representative plays of the important periods of theatre, including outstanding plays of Greece, Italy, Germany, Sweden, Spain, Russia, England and the United States. An attempt is made to understand in

depth the influence of the times upon the plays and authors studied. Prerequisite: EN 369.

EN 367 FILM THEORY AND CRITICISM (3) A study of the basics of film communication, various film modes and structure. A development of bases for evaluation of films according to communicative and aesthetic values will be a primary aim.

EN 368 DIRECTING II (3) Function of the director as interpreter, organizer, teacher, and stage manager in relation to the overall production; problems of involved physical staging, based on analysis of ground plan, interpretation, and craft procedures; relationship of the director to the set, lighting, and costume designers; special emphasis on creative interrelationship between the actor and director, as related to the interpretation and acting out of a play. Students will be required to direct at least a one-act play. Scenes and laboratory work with class analysis and criticism will be included. Prerequisite: EN 355.

EN 369 HISTORY OF THE THEATRE (3) An introductory course concerned with the historical development of the theatre. It will consist of a survey of the origins of Western theatre from Greece to the present time.

EN 370 MODERN DRAMA (3) Plays, beginning with those of Ibsen, and ending with contemporary playwrights, will be read and discussed. The modern plays will be compared with those of other periods. The development of various approaches and techniques used by playwrights will also be studied.

EN 371 PLAYWRITING (3) The techniques of the craft of playwriting. Students will have an opportunity to write one of the basic types of plays: a children's play, pageant, one-act or three-act. Individual conferences will supplement the class discussion and analysis of student writing.

EN 374 JOURNALISM I (3) An introduction to the technique of writing news stories, feature articles, and editorials, in addition to a study of journalistic standards. Also included will be news editing, headline writing, copy editing, judging the news, and the editor and the law. Media covered will include newspapers, news magazines, television and radio news.

EN 375 JOURNALISM II (3) Training in the writing of background stories, situation stories, columns, news analysis, investigative techniques, and the art and craft of making news understandable. Prerequisite: EN 374.

EN 376 MODERN BRITISH AND AMERICAN POETRY (3) Reading and discussion of the foremost English and American poets of the 20th century. Special attention is given to the experimental forms and the modern thought of the poetry.

EN 377 FEATURE WRITING (3) Preparation of articles aimed at periodical markets. Analysis of markets. Designed to show the student not only how to write for publication, but also how to market material written for the non-fiction field. Prerequisite: Permission of instructor.

EN 378 WRITING FOR TELEVISION (3) Shows the student how to write for various aspects of this medium including creative public service announcements, educational documentaries, newscasts, promotional material, and copywriting in general. Students will write their own scripts utilizing actual professional script models. At least one field trip will be made to a professional studio.

EN 379 NEWS MEDIA SEMINAR: CONCEPTS AND ISSUES (3) A seminar in which participants will conduct an analysis of American mass communications; specifically, an examination of the development of news media and an evaluation of its control. Various components of the news media (wires, syndicates, networks, newspapers, magazines and books, radio and television) will also be evaluated as will their news coverage of such areas of public interest as government, violence and crime, national security and war, minorities and women, and specialized news. Prerequisite: Journalism II and consent of the instructor.

EN 380 PRACTICUM IN ENGLISH (3-12) A practical internship program for English majors who want to gain real experience in on-the-job training such as theatre, television, radio, report writing, news writing, insurance underwriting, education, editing, public relations, and advertising. Students will participate for a stipulated period under professional supervision and will be periodically observed by college faculty.

EN 381 TELEVISION DRAMA (3) Because television actually has its own unique drama form and technique in contrast to those plays written for the theatre, this course will examine the various differences and the specific challenges for the television playwright. The student will study some of television's most critically acclaimed plays from the 1950's to the present. Included will be the works of such television dramatists as Paddy Chayefsky, Reginald Rose, Rod Serling, Robert Crean, Ronald Ribman, Stanley Gray, and Loring Mandel.

The original television scripts will be studied from teleplay anthologies now available in paperback. Prerequisite: six credits of literature courses.

EN 384 SPECIAL TOPICS IN JOURNALISM (3) Examines the figures, issues, and periods not dealt with in the basic curriculum; in particular, the course will scrutinize those topics and issues central to an understanding of the history of journalism. Specific content will vary in response to particular student and staff interests. The shifting emphasis of subject matter is also designed to achieve depth rather than breadth.

EN 386 NEW PERSPECTIVES IN STUDYING MODERN ENGLISH (3) A comparison of traditional and modern grammar designed to illustrate the effectiveness of the modern approach. Writings on the latest dictionaries, changes in word meanings, and controversies about grammar will be read and discussed.

EN 387 WORLD DRAMA (3) This course deals mainly with discussion, interpretation and critical evaluation of selective texts from the world's drama (from the Greeks to the present) emphasizing genres and periods. Consideration will also be given to the ideas, structures, styles, and techniques of dramatic literature.

EN 388 SPECIAL TOPICS IN WRITING (1-3) Concentrated study of such writing specialties as screenwriting, television and film documentaries.

EN 391 SPECIAL STUDIES IN FILM (3) Intensive study of significant individuals, groups, topics, or movements in the development of film.

EN 392 BUSINESS AND TECHNICAL WRITING (3) An advanced course, designed to teach effective writing techniques for specific application to business and to give students experience in the preparation of a variety of business letters and reports. Study includes advertising, technical bulletins, instruction manuals, specifications, and press releases. Students will leave the course with a portfolio of technical writing samples. A number of writing, research, and editing skills will be studied. Prerequisite: EN 102

EN 393 HISTORY AND DEVELOPMENT OF MOTION PICTURES (3) A study of the evolution of the motion picture as an international art form and social force. Students will make an analysis of form, technique and impact of film. A selected screening of representative film styles and content will be made.

EN 394 NEWS EDITING (3) News selection, preparation and display. Editing to save space, to make the news meaningful, judging the news headline writing, the editor and the law. Prerequisite: EN 374.

EN 395 SPEAKING ON RADIO AND TELEVISION (3) Directed toward those students interested in broadcasting careers or in heightening their awareness of the extensive contrasting oral approaches used in both media. Utilizing actual in-studio environs, individual instruction, and classroom involvement, the course will expose the student to all the varying speaking situations and the expertise needed. Some of the key areas to be covered will be general radio and television announcing and the differences between the two, interviewing style and techniques, narration, panel discussions, talk programs, newscasting and sportscasting.

EN 397 SPECIAL TOPICS IN LITERATURE (3) Focuses on a specific period, genre, writer, or group of writers, chosen in keeping with the instructor's field of specialization and in response to student interest. Prerequisite: a 200-level literature course.

EN 399 INDEPENDENT STUDY (3-6) Independent work in a field of special interest in either literature or language not covered by our regular course offerings. The student will be assigned a faculty member qualified to supervise the independent study project. The student must apply to the department Chair at least one semester in advance of the one during which he/she engages in the study and the project must be approved by the Department Curriculum Committee.

FOREIGN LANGUAGES AND LITERATURES

The Department of Languages offers a sequence of courses of graduated difficulty in the languages of five groups which have influenced our civilization: French, German, Portuguese Italian and Spanish. Japanese I and II was offered during the 1989-90 academic year and pending approval, it will be offered every other year. In addition, we offer courses which introduce the student to the cultures of those peoples through lectures and readings in English. These courses are also part of the General Education core. From time to time other languages e.g. Chinese, Russian, Esperanto, have been offered for both credit and non-credit through the Division of Continuing Education.

The department offers the student the opportunity to gain a working knowledge of one or more languages through minor concentrations in French, German, Italian and Spanish. The minor consists of a minimum of eighteen credit hours including the 103 and 104 courses in each language. The major programs in French and Spanish require a minimum of thirty-six credit hours. These programs provide the student with a strong liberal arts education and an in-depth study of the language and cultural achievements of the French and the Spanish-speaking peoples.

The department also has a fully-accredited teacher training program in both Spanish and French, administered in conjunction with the Department of Education.

A working knowledge of another language provides opportunities in business and commerce, government and social services and in professional careers.

REQUIREMENTS FOR FRENCH AND SPANISH MAJORS

French Major
Requirements: a minimum of 36 credit hours including

LF 103 French III	(3)
LF 104 French IV	(3)
LF 200 French Conversation	(3)
LF 201 Readings in French Literature	(3)
LF 202 French Composition	(3)
LF 203 French Civilization	(3)
LF 300 French Literature I	(3)
LF 301 French Literature II	(3)
plus at least 12 credits of French electives.	(12)

Spanish Major
Requirements: a minimum of 36 credit hours including:

LS 103 Spanish III	(3)
LS 104 Spanish IV	(3)
LS 200 Spanish Conversation	(3)
LS 201 Readings in Hispanic Literature	(3)
LS 203 Spanish Civilization	(3)
LS 204 Spanish-American Civilization	(3)
LS 300 Spanish Literature I	(3)
LS 301 Spanish Literature II	(3)
LS 307 Spanish-American Literature I	(3)
LS 308 Spanish-American Literature II	(3)
plus at least 6 credits of Spanish electives	(6)

COURSES TAUGHT IN ENGLISH

LL 101 INTRODUCTION TO THE STUDY OF LANGUAGE (3) An examination of the procedures used in the study of the phenomenon of language; a study of the structure of the world's most spoken languages; a history of the Indo-European language family. No prerequisite.

LL 102 ESSENTIALS OF LATIN (3) An introduction to basic Latin vocabulary in order to emphasize the impact of Latin on English vocabulary through etymological studies and exercises. Word derivation will be stressed. No prerequisite.

LL 300 METHODS OF TEACHING LANGUAGE (3) An introduction to the professional aspects of teaching foreign languages including the selection and evaluation of materials and methodologies, use of the laboratory, etc. No prerequisite.

LS 301 PHONETICS (3) Introductory study of Romance philology. The formation and the discrimination of the sounds of standard French and Spanish will be explained and practiced in class. Patterns of stress, pitch, intonation and linking will also be practiced. Prerequisite: LF 104, LS 104 or the equivalent. Offered odd years for prosective French teachers, and even years for prospective Spanish teachers.

LE 101 FRENCH CULTURE (3) An introduction to the people and ideas which have shaped the culture of the French-speaking world. No prerequisite.

LE 102 GERMAN CULTURE (3) An introduction to the people and ideas which have shaped the culture of the German-speaking world. No prerequisite.

LE 103 ITALIAN CULTURE (3) An introduction to the people and ideas which have shaped the culture of the Italian-speaking world. No prerequisite.

LE 104 HISPANIC CULTURE (3) An introduction to the people and ideas which have shaped the culture of the Spanish-speaking world. No prerequisite.

FRENCH

LF 101 FRENCH I (3) The first course in the French language sequence. An introduction to the sounds and basic grammatical structures of standard conversational French. Stress on oral comprehension and speaking as well as the reading and writing of simple grammatical patterns. Vocabulary is limited to about 400-500 of the most used words. No prerequisite.

LF 102 FRENCH II (3) The second course in the French sequence. Stress on oral comprehension and speaking as well as the increased practice of reading and writing. Additional active vocabulary of 400-500 of the most common items. Prerequisite: one semester of college or one year of high school French.

LF 103 FRENCH III (3) The third course in the French sequence. Stress on oral comprehension, speaking, reading and writing about topics dealing with contemporary life in the French-speaking world. An additional active vocabulary of 400-500 new words. Prerequisite: two semesters of college or two years of high school French.

LF 104 FRENCH IV (3) The fourth course in the French sequence. Continued emphasis on the four language skills with topics about contemporary life. Additional vocabulary of 400-500 new words. Prerequisite: three semesters of college or three years of high school French.

LF 120 INTENSIVE FRENCH I & II (6) A one semester course covering the material of both French I and French II. Emphasis on speaking and understanding the spoken language.

LF 121 INTENSIVE FRENCH III & IV (6) A one semester course covering the material of both French III and French IV. Emphasis on speaking and understanding the spoken language.

LF 200 FRENCH CONVERSATION (3) A course which enables the student to practice the vocabulary and the conversational patterns which have already been learned while expanding both vocabulary (300-400 new items) and self-expression. Prerequisites: LF 104 or the equivalent.

LF 201 READINGS IN FRENCH LITERATURE (3) Selected readings on an intermediate level. The goal is the development of the student's vocabulary and reading skills. Reading material will be drawn from various appropriate sources. Prerequisite: LF 104 or the equivalent.

LF 202 FRENCH COMPOSITION (3) A course which offers the student the opportunity to practice writing French. Assignments will include the writing of expository prose, personal and business letters. Prerequisite: LF 104 or the equivalent.

LF 203 FRENCH CIVILIZATION (3) An examination of the elements which have formed the culture of present-day society in the French-speaking world. Special attention will be paid to the people and ideas whose contributions embody the spirit of French culture. A working knowledge of French is required. Prerequisite: LF 104 or the equivalent.

LF 300 FRENCH LITERATURE I (survey) (3) A survey of French literature from the medieval era to the beginning of the Nineteenth Century; a critical analysis of selected works by the leading literary figures. Prerequisite: LF 201 or the equivalent.

LF 301 FRENCH LITERATURE II (survey) (3) A survey of French literature in the Nineteenth and Twentieth Centuries; a critical analysis of selected works by the leading literary figures. Prerequisite: LF 201 or the equivalent.

LF 302 CLASSICISM (3) An examination of the literature, philosophy and aesthetics of French Classicism through the works of its most representative exponents. Prerequisite: LF 300 or the equivalent.

LF 303 ENLIGHTENMENT (3) An examination of the literature, philosophy and aesthetics of the Enlightenment through the works of its most representative exponents. Prerequisite: LF 300 or the equivalent.

LF 304 ROMANTICISM, REALISM, SYMBOLISM (3) An examination of the main literary trends of the Nineteenth Century through the works of their most representative exponents. Prerequisite: LF 301 or the equivalent.

LF 306 CONTEMPORARY LITERATURE (3) An examination of the major Twentieth Century literary works of the French speaking world. Prerequisite: LF 301 or the equivalent.

LF 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of French literature. A reading knowledge of French is required. Prerequisite: LF 300 or LF 301 or the equivalent.

GERMAN

LG 101 GERMAN I (3) The first course in the German language sequence. An introduction to the sounds and basic grammatical patterns of standard conversational German. Stress on oral comprehension and speaking. Vocabulary is limited to about 300-400 of the most used words and expressions. No prerequisite.

LG 102 GERMAN II (3) The second course in the German sequence. Stress on oral comprehension and speaking plus the reading and writing of simple sentence patterns. Additional active vocabulary of 400-500 new words. Prerequisite: one semester of college or one year of high school German.

LG 103 GERMAN III (3) The third course in the German sequence. Stress on oral comprehension and speaking, reading and writing about topics dealing with contemporary life in the German-speaking world. Additional active vocabulary of 400-500 new items. Prerequisite: one year of college or two years of high school German.

LG 104 GERMAN IV (3) The fourth course in the German sequence. Continued emphasis on the four language skills with topics drawn from contemporary life in German-speaking Europe. An additional vocabulary of 400-500 new items. Prerequisite: three semesters of college or three years of high school German.

LG 120 INTENSIVE GERMAN I & II (6) A one semester course covering the material of both German I and German II. Emphasis on speaking and understanding the spoken language.

LG 200 GERMAN CONVERSATION (3) A course which enables the student to practice the vocabulary and conversational patterns which have already been learned while expanding both vocabulary (300-400 new items) and self-expression. Topics will be taken from newspaper and magazine articles dealing with current issues. Prerequisite: LG 104 or the equivalent.

LG 201 READINGS IN GERMAN LITERATURE (3) Selected readings on an intermediate level whose goal is the development of the student's vocabulary and reading skills. Reading material will be selected from the most current sources, and will include topics dealing with politics, business and commerce, the social scene and the arts. Prerequisite: LG 104 or the equivalent.

LG 202 GERMAN COMPOSITION (3) A course which offers the student the opportunity to practice writing in German. Assignments will include the writing of personal and business letters and expository prose. Prerequisite: LG 104 or the equivalent.

LG 203 GERMAN CIVILIZATION (3) An examination of the elements which have formed the culture of present-day society in German-speaking Europe. Special attention to the people and ideas whose contributions embody the spirit of German culture. A working knowledge of German is required. Prerequisite: LG 104 or the equivalent.

LG 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of German literature. A reading knowledge of German is required. Prerequisite: LG 201 or the equivalent.

ITALIAN

LI 101 ITALIAN I (3) This is the first course in the Italian language sequence. It is designed to introduce the student to the Italian language and to provide a foundation in both spoken and written Italian. Basic structures and vocabulary will be covered. No prerequisite.

LI 102 ITALIAN II (3) The second course in the Italian sequence will continue with more basic structures and will introduce short reading selections from contemporary works, as well as aspects of Italian culture. Prerequisite: one semester of college or one year of high school Italian.

LI 103 ITALIAN III (3) The third course in the Italian sequence will review and expand structures and vocabulary by means of conversations, compositions and oral reports in order to increase fluency in spoken and written contexts. Prerequisite: two semesters of college or two years of high school Italian.
LI 104 ITALIAN IV (3) The fourth course in the Italian sequence will continue to drill on structures and more advanced vocabulary so that by this time the student will be able to express himself in a correct and natural way. Emphasis will be put on phonetics. Prerequisite: three semesters of college or three years of high school Italian.

LI 200 ITALIAN CONVERSATION (3) This course enables the student to practice the vocabulary and conversational patterns which have already been learned while expanding both vocabulary and self-expression. Topics will be drawn from newspaper and magazine articles which deal with current issues. Prerequisite: LI 104 or the equivalent.

LI 201 READINGS IN ITALIAN LITERATURE (3) An introduction to the major authors of Italian literature from Dante to modern authors. General trends, movements, genres will be emphasized. Lectures and discussions in Italian will be supplemented by selected readings from major writers. Prerequisite: LI 104 or the equivalent.

LI 202 ITALIAN COMPOSITION (3) Emphasis on writing. Compositions, both guided and free, will be assigned on a regular basis. Written reports will also be expected of students. Prerequisite: LI 104 or the equivalent.

LI 203 ITALIAN CIVILIZATION (3) A study of the development of Italian civilization from the Middle Ages to the present. It will consist of a rapid, cursory study of Italian history, literature, art music, as well as social and political problems. Lectures and discussions in Italian. Prerequisite: LI 104 or the equivalent.

LI 399 INDEPENDENT STUDY (3) A course offered by special arrangement to a student interested in studying an aspect of Italian literature. A reading knowledge of Italian is required. Prerequisite: LI 201 or the equivalent.

PORTUGUESE

LP 101 PORTUGUESE I (3) The first course in the Portuguese language sequence. Stress on oral proficiency, writing and reading. Vocabulary is limited to about 300-400 of the most used words and expressions. Introduction to the cultures of Brazil and Portugal. No Prerequsite.

LP 102 PORTUGUESE II (3) The second course in the Portuguese sequence. Stress on oral proficiency, writing, and reading. Additional active vocabulary of 400-500 new words. Introduction to the cultures of Brazil and Portugal. Prerequisite of one semester of college or one year of high school Portuguese.

LP 120 INTENSIVE PORTUGUESE (6) A one semester course covering the material of both Portuguese I and Portuguese II. Emphasis on spoken and written Portuguese.

SPANISH

LS 100 SPANISH FOR HISPANICS (3) A course in reading and writing Spanish for those who are native speakers of the language. Aims at improved knowledge of grammar, orthography and paragraph structure, lexical expansion, and facility in composition. Attention to interference from English syntactic patterns. Brief readings from selected Hispanic authors as basis for discussion and composition. No prerequisite.

LS 101 SPANISH I (3) The first course in Spanish for those who have never studied the language before. Through an introduction to both sounds and basic grammatical structures, it will provide the student with a foundation in both spoken and written Spanish. In this course the emphasis will be on oral comprehension and speaking, and acquisition of a limited, basic vocabulary.

LS 102 SPANISH II (3) The second course in the Spanish sequence. Stress on oral comprehension and speaking will continue, along with increased practice in reading and writing, and enlargement of active vocabulary. Prerequisite: one semester of college or one year of high school Spanish.

LS 103 SPANISH III (3) The third course in the Spanish sequence will review and seek to expand students' understanding of grammatical structures. Increased emphasis on reading and writing through materials dealing with aspects of the Spanish-speaking world. Prerequisite: two semesters of college or two years of high school Spanish.

LS 104 SPANISH IV (3) The fourth course in the Spanish sequence. Stress on reading and

some practice in writing, and on the acquisition of new vocabulary. The four language skills listening, speaking, reading and writing will be practiced in relation to topics dealing with the Spanish-speaking world and with contemporary life. Prerequisite: three semesters of college or three years of high school Spanish.

LS 120 INTENSIVE SPANISH I & II (6) A one semester course covering the material of both Spanish I and Spanish II. Emphasis on speaking and understanding the spoken language.

LS 121 INTENSIVE SPANISH III & IV (6) A one semester course covering the material of both Spanish III and Spanish IV. Emphasis on speaking and understanding the spoken language.

LS 200 SPANISH CONVERSATION (3) Conversation based upon a wide variety of topics both extemporaneous and assigned. Practice with often used expressions and patterns of speech common in a conversational style. The main objective is to develop fluency in speaking and ease in understanding. Prerequisite: LS 104 or the equivalent.

LS 201 READINGS IN HISPANIC LITERATURE (3) Selected readings on an intermediate level of difficulty to develop reading skills and increase vocabulary. An introduction to various literary forms and styles and the vocabulary necessary for literary analysis. Prerequisite: LS 104 or the equivalent.

LS 203 SPANISH CIVILIZATION (3) An examination of the forces, conflicts and beliefs which have shaped Spanish culture. Special attention to major works in the visual arts, music and literature which embody the artistic achievements of Spanish civilization. Oral and reading competence in Spanish is required. Prerequisite: LS 104 or the equivalent.

LS 204 SPANISH-AMERICAN CIVILIZATION (3) An examination of the culture of Spanish America in both pre-columbian and modern times. Emphasis on the diversity of Hispanic cultures in America and the artistic achievements of Spanish-American civilization. Special attention to Mexico, Puerto Rico and contemporary issues in the Hispanic world. Prerequisite: LS 104 or the equivalent.

LS 205 SPANISH COMPOSITION (3) An opportunity to develop your own style in writing by putting words and sentences together in accordance with the rules of Spanish grammar and rhetoric. The student will practice sentence patterns of differing length and complexity. Stress will be placed on the solution of specific problems of Spanish composition. Prerequisite: LS 104 or the equivalent.

LS 206 ADVANCED ORAL SPANISH (3) Intensive practice in speaking in a variety of formal and informal situations so that the student will gain self-confidence in expressing personal ideas in Spanish. Prerequisite: LS 200 or the equivalent.

LS 300 SPANISH LITERATURE I (survey) (3) A survey of Peninsular literature from the medieval era to the end of the Eighteenth Century; a critical analysis of selected works by the leading literary figures. Prerequisite: LS 201 or the equivalent.

LS 301 SPANISH LITERATURE II (survey) (3) A survey of Peninsular literature of the Nineteenth and Twentieth Centuries; a critical analysis of selected works by the leading literary figures. Prerequisite: LS 201 or the equivalent.

LS 302 MEDIEVAL AND RENAISSANCE LITERATURE (3) An examination of the most representative literary works from the medieval era through the Renaissance. Prerequisite: LS 300 or the equivalent.

LS 303 GOLDEN AGE (3) A study of Spanish literature from the late Sixteenth Century to the Baroque era. Prerequisite: LS 300 or the equivalent.

LS 304 CERVANTES (3) An in-depth study of Don Quixote and major critical approaches to this work. Prerequisite: LS 300 or the equivalent.

LS 305 ROMANTICISM AND REALISM (3) An examination of Spanish literature in the Nineteenth Century through the works of the most representative literary figures. Prerequisite: LS 301 or the equivalent.

LS 306 CONTEMPORARY PENINSULAR LITERATURE (3) A study of Spanish literature from the generation of 1898 to the present. Prerequisite: LS 301 or the equivalent.

LS 307 SPANISH-AMERICAN LITERATURE I (survey) (3) A survey of Spanish-American literature from the colonial period to Ruben Dario; a critical analysis of selected works by the leading literary figures. Prerequisite: LS 201 or the equivalent.

LS 308 SPANISH-AMERICAN LITERATURE II (survey) (3) A survey of Spanish-American literature from Ruben Dario to the present; a critical analysis of selected works by the leading

literary figures. Prerequisite: LS 201 or the equivalent.

LS 309 CONTEMPORARY SPANISH-AMERICAN LITERATURE (3) A study of selected major works from the period 1950 - 1970 (the "Boom"), with an emphasis on the novel. Prerequisite: LS 308 or permission of the instructor.

LS 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of Spanish literature. A reading knowledge of Spanish is essential. Prerequisite: LS 300, LS 301, LS 307 or LS 308 or the equivalent.

GEOGRAPHY AND REGIONAL PLANNING

The Department of Geography and Regional Planning offers the Bachelor of Science Degree in Regional Planning, minors in Geography and Regional Planning, and the Cartography Certificate. Interdisciplinary in nature, the field of planning requires knowledge and skills from the areas of the geographic and environmental sciences, political theory and public policy, and design applications. Many students are dual majors in Regional Planning and related concentrations.

Department courses in geographic thought cover the topical areas of earth science, culture-environment, locational and area analysis. Physical geography deals with the description and analysis of the earth's surface, its physical patterns, and human occupance. Cultural, social, and economic aspects of our relationship to the earth are discovered in the interaction between the geographic environment and human behavior.

Students in the Regional Planning major learn to analyze conflicts between land development and preservation. Land use problems are related to environmental pollution, community and economic development, urban design, historic preservation and transportation issues. A strong internship program has placed qualified students in private land use, development, real estate, and public planning agencies.

Recent graduates are employed as town planners; consultants for environmental engineering; they are employed in land use and transportation firms; and are policy analysts and educators. Several of our graduates have gone on to graduate schools across the country.

The Geography and Regional Planning Department has excellent facilities and equipment. Housed in the Wilson Science Building is the computer cartography/remote sensing laboratory, which contains remote sensing video and digital analysis equipment, color and engineering quality and pen plotters, various types of microcomputer hardware and software for cartography, and hardwire connections with the computer center's CDC CYBER and VAX hardware. Also available for cartography students is a completely equipped darkroom and photography complex including a large overhead camera. A new Wilson Science Building weather center contains a computer link to a weather data computer, local meteorological sensors and weather satellite equipment capable of receiving up-to-date images of the earth from the geostationary weather satellite. Department facilities in Bates Hall include a cartography laboratory, physical geography laboratory room and a seminar room.

REQUIREMENTS FOR REGIONAL PLANNING MAJORS

Regional Planning Shared Core - 16 hours: required

GP 101	Principles of Geography	(3)
GP 102	Physical Geography	(3)
GP 103	Physical Geography Laboratory	(1)
GP 105	Introduction to Urban and Regional Planning	(3)
GP 106	Introduction to Environmental Analysis	(3)
GP 360	Seminar in Planning Problems	(3)

Regional Planning Methodology - 9 hours; any three (3) courses

GP 231	Introduction to Cartography	(3)
GP 240	Spatial Analysis	(3)
GP 242	Introduction to Computer Mapping	(3)
GP 243	Aerial Photo Interpretation	(3)
GP 340	SPSS: Statistical Package for Social Scientists	(3)
GP 342	Advanced Computer Mapping	(3)
GP 343	Remote Sensing	(3)

Land Use and Environment Applications - 9 hours: any three (3) of the below listed courses.

GP 214	Behavioral Geography	(3)
GP 215	Economic Geography	(3)
GP 216	Urban Geography Seminar	(3)
GP 218	Recreational Geography	(3)
GP 219	Land Use and Resource Planning	(3)
GP 220	Landform Evaluation for Planners	(3)
GP 230	Introduction to Meteorology	(3)
GP 238	Environmental Impact Analysis	(3)
GP 314	Transportation Geography	(3)
GP 315	Site Location Analysis	(3)

Regional Planning Electives - 9 hours, take any three (3) courses listed below or any courses taken beyond the required from the Land Use and Environmental Applications courses listed above.

BI 201 General Ecology	(3)
BI 202 Conservation	(3)
BI 223 Environmental Legislation	(3)
CJ 206 Crime and the City	(3)
EC 301 State and Local Finance	(3)
EC 304 Economics of Urban Development	(3)
EN 347 Advanced Writing Techniques	(3)
GP 211 Population Geography	(3)
GP 217 Global Issues of the Future	(3)
GP 219 Land Use and Resource Planning	(3)
GP 300 Regional Geography of Europe	(3)
GP 301 Regional Geography of Africa	(3)
GP 308 Cultural Geography of Europe	(3)
GP 350 Internship in Urban/Regional Analysis	(3)
GP 351 Internship in Regional/Environmental Planning	(3)
GP 399 Independent Study in Geography and Planning	(3)
HI 345 Contemporary American City	(3)
HI 348 History of City/Regional Planning	(3)
HI 269 Contemporary American City	(3)
HI 365 History of Urban/Regional Planning	(3)
HI 344 The City in American History	(3)
PL 204 Introduction to Public Administration	(3)
PL 205 Urban Politics	(3)
PL 318 Public Management Skills	(3)

Minors in Geography and Regional Planning

The minor in Regional Planning is tailored to the particular interests of the student in the Regional Planning program. The minor requires a total of 18 semester hours of coursework, including GP 105 and GP 106, any one course listed in the methodology section, and any three courses listed in the Land Use and environmental applications sections.

The department offers two (2) Geography Minors which require 18 semester hours. Principles of Geography (GP 101) is required in each minor. The student is advised of the courses related to specific interests from the courses listed below..

The Cultural-Regional Geography minor involves a specialization in a particular region of the world. The Applied Geography minor includes courses related to site location analysis and application.

APPLIED GEOGRAPHY

GP 101 Principles of Geography	(3)
GP 105 Intro Urban & Region Analysis	(3)
GP 240 Spatial Analysis	(3)
GP 102 Physical Geography and Lab	(4)
GP 241 Cartography	(3)
GP 242 Computer Mapping	(3)
GP 215 Economic Geography	(3)
GP 216 Urban Geography	(3)
GP 314 Transportation Geography	(3)
GP 244 Remote Sensing	(3)
GP 214 Behavioral Geography	(3)
GP 230 Meteorology or GP 330 Climatology	(3)
GP 213 Travel and Tourism	(3)
GP 332 Geomorphology	(3)
GP 340 Statistical Package for Social Scientists	(3)

CULTURAL-REGIONAL GEOGRAPHY

GP 101 Principles of Geography	(3)
GP 202 Geography of Anglo-America	(3)
GP 214 Behavioral Geography	(3)
GP 102 Physical Geography and Lab	(4)
GP 210 Cultural Geography	(3)
GP 212 Political Geography	(3)
GP 300 Geography of Europe	(3)
GP 301 Geography of Africa	(3)
GP 302 Geography of North America	(3)
GP 241 Cartography	(3)
GP 330 Climatology	(3)

Cartography Concentration and Minor (Cartography Certificate Program)
Cartography is the part of geography that deals with the theory, design, and production of maps. The Cartography concentration/minor is a set of courses designed for students who wish to pursue a career in this field. In order to help students meet federal guidelines for an entry level cartographer, the following courses are required of students seeking a concentration or minor in cartography at Westfield State College:

Prerequisites for Admission to the Cartography Concentration Program (9 hours)

GP 101 Principles of Geography or GP 102 Physical Geography	(3)
MA 103 Pre-calculus Math I	(3)
MA 104 Pre-calculus Math II	(3)

Required Courses in Cartography Concentration/Minor (18 credits)

GP 241 Introduction to Cartography	(3)
GP 341 Advanced Cartography	(3)
GP 242 Computer Mapping	(3)
GP 243 Aerial Photo Interpretation	(3)
GP 340 Statistical Package for the Social Sciences	(3)
GP 343 Remote Sensing	(3)
FA 206 Lettering and Layout	(3)

COURSES

GP 101 PRINCIPLES OF GEOGRAPHY (3) An introductory course which introduces the student to the scientific principles of geography, including spatial organization, spatial diffusion, Central Place Theory, urban landuse and human-environment interaction. Students also learn to interpret maps and do exercises in a variety of modern geographic topics such as migration, site location and computer mapping.

GP 102 PHYSICAL GEOGRAPHY (3) Analysis, through a conceptual approach of regional landform development, climatic patterns, vegetation distributions, soil groupings and factors influencing the location of major economic minerals. The man-land relationship will be emphasized. Extensive use of maps.

GP 103 PHYSICAL GEOGRAPHY LABORATORY (1) An optional laboratory session correlated with GP 102 Physical Geography. Conduct of this course will include field study and laboratory techniques. Map and aerial photographic interpretation skills will be emphasized. Prerequisite: Concurrent enrollment or previous enrollment in GP 102.

GP 105 INTRODUCTION TO URBAN AND REGIONAL ANALYSIS (3) Deals with the history of urban planning, planning theory and the specialty areas of planning, including physical, social and economic planning. Urban, regional and environmental issues are related to applications of solutions to land-use problems at the municipal, state and federal levels. Specific topics covered: innovative zoning techniques, land preservation strategies, governmental programs for housing and economic revitialization and comprehensive master planning

GP 106 INTRODUCTION TO ENVIRONMENTAL ANALYSIS (3) Introduces the interface of the human and natural environmental systems. Topics include air and water pollution, forest and wildlife preservation, risk assessments of floods and other hazards, urban climatology and various techniques of environmental assessment.

GP 200 GEOGRAPHY OF EUROPE (3) A regional geographic study of physical, economic, cultural and political patterns of Europe. Population patterns will be evaluated via sequent occupance studies. Assets and liabilities of individual states will be evaluated and discussed in an attempt to promote a better appreciation of the geographic structure of Europe.

GP 201 GEOGRAPHY OF AFRICA (3) A regional, physical and cultural geographic survey of Africa. A study of the distribution of land and people, physical environment, resources, settlement, and economic development. Special emphasis will be given to cultural elements. A geographic interpretation of the political and economic problems of emerging African States will be considered. Prerequisite: GP 101.

GP 202 GEOGRAPHY OF ANGLO-AMERICA (3) A physical and cultural survey of Anglo-America. A geographic interpretation of the settlement, resource development and problems of Anglo-America.

GP 210 CULTURAL GEOGRAPHY (3) An analysis of the man-land relationship as evidenced in the variety of culture worlds that exist. Special emphasis on growth of the population as well as the invention and diffusion of ideas.

GP 211 POPULATION GEOGRAPHY (3) Discusses the spatial distribution of the three major demographic variables, fertility, mortality and migration. Attention also given to US migration trends, the demographic transition, world economic development, geography of disease and the use of certain demographic techniques (e.g., population projections, etc.).

GP 212 POLITICAL GEOGRAPHY (3) 1. International disputes over boundaries and resources, including internal conflicts over water rights. 2. The Law of the sea. 3. Political manipulation of space (e.g., Gerrymandering, "redlining," redistricting, etc.). and 4. Electoral politics; geographic expression of voting patterns on a national, regional, state and urban level.

GP 213 TRAVEL AND TOURISM (3) Surveys major world tourist areas, the role of the physical environment in tourism and recreation, trip planning, travel agency operations and recreational planning.

GP 214 BEHAVIORAL GEOGRAPHY (3) Behavioral geography focuses on the relationship (or interaction) between the geographic environment and human spatial behavior. Some major topics of the course include: how one's mental images of the environment influence spatial behavior; cognitive mapping, a study of human orientation in geographic space; preferences or evaluations of certain types of climates or landscapes; models of spatial decision making (e.g., migration decisions, human versus environment studies (hazard perception) personal space; and the affective bond between people and places. Prerequisite: sophomore standing.

GP 215 ECONOMIC GEOGRAPHY (3) An analysis of basic economic activities and the ways in which environmental factors affect them. Major emphasis is given to the differences between economies of abundance and economies of scarcity, with special emphasis on present world resource problems. This course may be taken as part of the requirements for Economic majors with the permission of both departments.

GP 216 URBAN GEOGRAPHY (3) A study of the urban setting through a geographical analysis of its social, economic, demographic, political and environmental problems. The structure of the course will allow the student to conduct independent research in areas where his/her main interests lie. Independent research will be prefaced with a short history of the origin, growth development and spread of urbanism. Prerequisite: permission of instructor.

GP 217 GLOBAL ISSUES OF THE FUTURE (3) Addresses a variety of conditions, problematical issues, and potential solutions confronting global society as we close in on the 21st century. Specific topics to be discussed include future shock, the consequences of a "shrinking" world, urbanization and world cities, trans-national corporations, alternative and exotic energy sources, environmental quality, resource scarcities, geopolitical developments, space control and colonization, and emergent lifestyles. Prerequisite: Sophomore standing.

GP 218 RECREATIONAL GEOGRAPHY (3) An introduction to the patterns of provision, use and management of recreation resources. Primary focus is on outdoor public recreation resources. Major topics include spatial analysis of physical setting, development of public needs, government policies, site management, economic and social concepts which impact on outdoor recreation planning. Special emphasis will be placed on the recreational resources of the New England region. Prerequisites: GP 101 or GP 102.

GP 219 LAND USE AND RESOURCE PLANNING (3) An analysis of land use within the urban area and a historical perspective on land use in America from colonial times to the present. Part two is devoted an in-field inventory of present day patterns of land use in a local urban area. The concluding segment of the course will involve analysis of the land use inventories to determine areas of conflicting land uses and to offer solutions to resolve these conflicts. Prerequisite: GP 102.

GP 220 LANDFORM EVALUATION FOR PLANNERS (3) This course provides students with a basic understanding of the physical setting in which planning is accomplished. The principles of landform analysis are intensively studied. Case studies involving natural hazards will be presented. Extensive use of maps. Prerequisite: GP 102.

GP 230 METEOROLOGY (3) A nonmathematical introduction to weather science. Students are introduced to the basic elements of weather: earth-sun relations, temperature, winds and atmospheric pressure, humidity and precipitation, air masses, fronts, cyclogenesis, weather forecasting and storms. Students are also acquainted with the use of weather instruments.

GP 236 ENVIRONMENTAL ANALYSIS II (3) Provides an advanced treatment of the problems created by the interfacing of natural and human systems in the environment. Special emphasis will be placed on problems unique to the New England context, including air and water pollution, waste management and the development of New England coastal areas. Prerequisite: GP 106.

GP 240 SPATIAL ANALYSIS (3) An introduction to the use of quantitative methods in the analysis of spatial distributions.

GP 241 INTRODUCTORY CARTOGRAPHY (3) A laboratory course which is designed to survey the field of cartography. An analysis is made of early map projections and the evolution of modern mapping techniques. Map intelligence, maps, and aerial photo interpretation will constitute a significant portion of the course. Emphasis will be given to the interpretation of data spatially. Each student will be introduced to the cartographic process and participate in the design, production and reproduction of various graphics.

GP 242 COMPUTER MAPPING (3) Student is introduced to the use of computer in automatic mapping operations, including the computer line printer, pen plotter and CRT. The basic computer mapping software packages are introduced: SYMAP and CALFORM. Student also learns map digitation processes. No computer programming knowledge is required for the course.

GP 243 INTRODUCTION TO AERIAL PHOTO INTERPRETATION (3) Introduces students to the interpretation of air photos and satellite data, particularly the LANDSAT earth resources satellite. Students are taught the use of stereoscopes and other remote sensing techniques, as well as some acquaintance with photogrammetry.

GP 301 SEMINAR IN REGIONAL AND ENVIRONMENTAL PLANNING (3) Focus of the seminar is on the formulation and development of a plan which addresses a particular land use or growth management problem. Readings and discussion involve aspects of the master planning process. Projects involve environmental pollution impact studies. Independent research is conducted by collecting and analyzing data and recommending alternatives and solutions to the planning problem. Prerequisite: GP 105, GP 106, GP 340 or the Permission of Instructor.

GP 305 REGIONAL GEOGRAPHY OF NEW ENGLAND (3) A study of the various physical features of New England: forms, climate, soil and vegetation, with an emphasis on natural resources and manufacturing.

GP 308 CULTURAL GEOGRAPHY OF EUROPE (3-6) A variable credit course for those students doing cultural geography fieldwork in Europe.

GP 314 TRANSPORTATION GEOGRAPHY (3) Deals with the evolution, significance, and underlying geographic principles of transportation, the theoretical bases of interaction,and the techniques of network analysis. The format of the course will allow the student to conduct independent research in the areas of interest. A significant portion of the course will introduce the student to computer-assisted techniques for transportation system analysis, although no student experience with computer operation is assumed. Prerequisite: GP 101.

GP 315 SITE LOCATION ANALYSIS (3) An introduction to the geography of locational analysis. Theories and methods of site locational analysis are introduced. Students are presented with case studies involving the best locations for various types of facilities, with special emphasis on business site location.

GP 330 CLIMATOLOGY (3) A study of the processes and patterns of the world's climates. After a review of basic meteorology, the Koppen and Thorthwaite Classification systems are discussed. The final portion of the course investigates applied climatology which includes: human biometeorology (climate and humans), agriculture climatology, climates past and future and the effect of climate on transportation, architecture, business and the construction industry. Prerequisite: GP 230.

GP 331 SEVERE AND UNUSUAL WEATHER (3) Introduces students to the meterorological conditions associated with the formation of severe weather conditions, and examines the

impact of hostile weather on human activities. Lectures focus on the Jet Stream and its role in the genesis of cyclones, blizzards, severe thunderstorms, lightning, hail, tornadoes, hurricanes, floods, droughts, cold and heat waves and bizarre weather phenomena such as dust devils, Chinooks, Haboobs, Santa Anas and mountainadoes. Prerequisite: GP 102 or GP 230.

GP 332 GEOMORPHOLOGY (3) An analysis of various processes of landform development, with emphasis on the delimitation of landform regions. Prerequisite: GP 102.

GP 340 STATISTICAL PACKAGE FOR SOCIAL SCIENTISTS (SPSS) (3) This course exposes students to the variety of statistical routines available in the widely-used Statistical Package for Social Sciences (SPSS). Classtime divided between lectures and application of statistical methods in SPSS program. Emphasis is placed upon a series of computer laboratory exercises, including frequency distributions, crosstabs, regression and correlation, Chi-Square, T-Test and others. No prior computer programming knowledge required.

GP 341 ADVANCED CARTOGRAPHY (3) Advanced principles of cartographic design and map reproduction. Coverage of topics such as map projections, landform representation, reproduction processes and advanced principles of thematic mapping. Prerequisite: GP 241.

GP 342 ADVANCED COMPUTER MAPPING (3) Deals with the production of maps and graphics at a more advanced level. Particular attention given to a computer mapping packages that have three-dimensional capabilities. Prerequisite: GP 242.

GP 343 ADVANCED REMOTE SENSING (3) An advanced approach which provides students with an introduction to the application of remote sensing techniques for the inventory and and analysis of earth resources. Included are treatments of exotic sensors, electromagnetic energy physics and data processing for digital classification techniques. Prerequisites: GP 102 and GP 243.

GP 350 INTERNSHIP IN REGIONAL AND ENVIRONMENTAL PLANNING (3-12) Students must apply for an internship to the Coordinator of Regional Planning one semester in advance of the one during which he/she will be scheduled to do the internship. Students who meet the criteria for internship status are matched with available options. Special interests and requirements of the skills of the internship position are taken into consideration in the assignment.

GP 360 FIELD METHODS (3) Explores the basic methods used to make physical and sociocultural observations or measurements in a spatial setting. Off-campus field work is required. Specific skills developed include map reading, aerial photographic interpretation, field sketch mapping, compass traverses, sampling, questionnaire design, interviewing, analysis and reporting. Prerequisites: GP 102 and Jr.-Sr. standing.

GP 390 SEMINAR IN GEOGRAPHY (3) This seminar will be conducted by members of the Geography Department and will include guest lectures. It will focus on geographic methods, the interdisciplinary nature of geography, methods of inquiry and present trends.

GP 399 INDEPENDENT STUDY (3-6) A course by special arrangement in a specific theoretical or applied area in Geography or Regional Planning. A student may be assigned a series of readings and discussions, or and applied project in an area of environmental quality control, land preservation or design techniques.

HISTORY

The major in History is structured to provide undergraduates with an understanding of the past as well as to teach skills enabling them to attack any sort of problem, to ask appropriate questions, to assemble valid evidence, and to arrive at rational conclusions. Given such training, the student majoring in History is prepared for graduate work in history or law, or to pursue careers in international business, communications, teaching, government service, museum administration, social work, and library science. The department also has a fully-accredited teacher-training program, administered in conjunction with the Department of Education.

An integral part of the department is the Institute for Massachusetts Studies, which publishes the Historical Journal of Massachusetts as well as books related to the history and culture of the region. The Journal draws important contributors and reviewers nationally, and has a circulation of well over one thousand, including university and college libraries in the United States and in several foreign countries. Students serve on a board of student editors, and outstanding student research papers are occasionally published.

The campus supports an active chapter of Phi Alpha Theta, the National Honor Society in History, and qualified students are inducted into the society in the junior or senior year.

Students are also offered a number of internship opportunities allied to the study of American History. These include museum work at Old Sturbridge Village, the Holyoke Museum, the Basketball Hall of Fame, and the Connecticut Valley Historical Museum, and archival and library work at the Springfield City Library and the John Fitzgerald Kennedy Library in Boston.

HISTORY MAJOR REQUIREMENTS
I. Major core 9 credits in 100-level History courses.
II. Major advanced program: In consultation with a department faculty adviser, students will define a field of concentration within one of three areas: European History, American History, or Non-Western (Africa, Asia, Latin America) History. The concentration will consist of 18 credits in one of the three areas listed above and will be supplemented by 12 credits in a different, but chronologically or topically related field, chosen from the two remaining areas.

Distribution of courses by level, concentration and allied area:

A. Core for major (9 credits)
100-level courses 9 s. hrs. credit
HI 101 Western Experience I (3)
HI 102 Western Experience II (3)
HI 130 United States History & Government (3)

B. Field of concentration (18 credits)
200-level courses 12 s. hrs. credit
300-level courses 6 s. hrs. credit

C. Allied field (12 credits)
200-level courses 9 s. hrs. credit
300-level courses 3 s. hrs. credit

Total credits in History Major 39

Descriptions of fields within the three areas noted above may be obtained from the History Department. Students interested in teacher-certification MUST meet with Dr. John Ifkovic, the program director, to ensure that they enroll in courses which meet the requirements of that program.

A. EUROPEAN

HI 101 WESTERN EXPERIENCE I (3) A survey of pre-modern (pre-1500 A.D.) Western civilizations. Major topics include: the "classical" societies of ancient Greece and Rome, the rise of Christian civilization in Europe, and the nature of medieval society and culture.

HI 102 WESTERN EXPERIENCE II (3) A multi-disciplinary approach to understanding the nature of modern (post-1500 A.D.) European civilization. Through lectures and discussions, students will explore demographic, sociological, political, and cultural elements of Europe's evolution from traditional to modern modes of activity and thought.

HI 201 MEDIEVAL EUROPE (3) The institutional, economic, and intellectual history of Europe as it emerged from its Roman and Germanic antecedents and developed into a distinctly western civilization. Emphasis will be placed upon the growth of medieval governmental institutions and the great intellectual achievement of the high middle ages.

HI 203 RENAISSANCE AND REFORMATION EUROPE (3) An examination of the "waning of the Middle Ages" and the "Dawn of a new era" in the light of recent historical research. The physical and psychological impact of the Black Death, the fascination with the classical past, the religious revolution and the possibility of individual creativity will be considered in the context of the scientific, social, and political assumptions of Europeans from the 14th through the 16th centuries.

HI 205 SEVENTEENTH CENTURY EUROPE, 1559-1715 (3) The 17th century began with political chaos, economic dislocation, religious passion, and endemic violence. The century ended with political stability, economic viability, toleration, and pervasive skepticism. The course will examine the nature of these changes, with particular attention to the physical and psychological impact of 17th century warfare, the nature of scientific inquiry, and the re-ordering of 17th century monarchies.

HI 207 18th CENTURY EUROPE (3) An examination of the development of this great age which launched Europe on the path of Revolution. Important political and intellectual antecedents will be discussed. This will be followed by a thorough study of the ideas, institutions and society of 18th century Europe, culminating in the French Revolution of 1789.

HI 209 19th CENTURY EUROPE (3) An examination of the effects of the combined forces of nationalism, revolution and the Industrial Revolution upon the fabric of European political, social, and economic institutions. Special consideration will be given to drives for national unity in Italy and Germany, and their effects upon the European balance of power prior to World War I.

HI 211 EUROPE SINCE 1919 (3) An examination of Europe's efforts to recover from the first World War, to work out the self-determination policy of the Versailles Treaty to survive the great depression, and to resolve the conflicts which precipitated World War II. The course will also examine the post-war problems of the United Nations, the cold war, the end of Imperialism, the common market, and new regional pacts.

HI 216 THE FRENCH REVOLUTION (3) This course will deal with the upheaval that effectively destroyed the age-old European hierarchical society and laid the foundation for modern political systems. The problem of the impact of ideas, the role of economic dislocation and political disfunction as portents of revolution will be considered. Use will be made of the newer research into demography and crowd psychology as well as of the traditional literary and historical sources.

HI 223 WORLD WAR I: The "Real" War (3) War was expected and planned for in turn-of-the-century Europe. Almost no one, however, was prepared for the obscene by nature and in a dimension unparalleled in the previous history of modern Europe. An entire generation of young men and "of the best among them" of each of the major powers of Europe perished in the "Great" War as it is called by Europeans. The course will treat the causes, he course and the nature of the war. The impact of the war on contemporaries will be measured through biographical, autobiographical and other literary sources written by participants in, or close observers of, the war.

HI 225 LONDON AND PARIS, 1610-1870 (3) A study of the transition of two major European cities from walled towns defined by charters of liberties to metropolitan capitals. Two broad categories will be considered: first, the changing relationship between the town and the territorial state, with the disappearance of walls and the impact of population explosion; and second, the changing patterns of settlement within the town, the growth of slums, the effectiveness of city planning, and the interrelation of town organization, crowd psychology and political revolution. Recent studies of urban demography, labor patterns and city planning will be used, as well as maps, pictures, memoirs and novels.

HI 231 MODERN BRITAIN, 1738 to WORLD WAR II (3) Explores a number of significant themes in the historical experience of Modern Britain; viz, the evolution of the social welfare state, the political and environmental impact of the industrial revolution, urbanization and demographic change, the political and social democratization of British society, the rise to great power status and the subsequent decline of Britain, and the impact of post-war economic and political organization upon traditional British structures and values.

HI 235 MODERN IRELAND, 1783 TO PRESENT (3) The major theme of the course will revolve around the origins, development, character and tactics of the Irish nationalist movement. The seventeenth century confiscations, the American and French Revolutions, the

Emancipation and Repeal movements, the Great Famine, the Home Rule agitation, and the Irish cultural renaissance which combined to create a militant Irish nationalism, culminating in the 1916 Rebellion, will be the major issues examined. Secondary themes will be the decisive role of the Irish Question in moulding British political and constitutional developments, the causes and significance of the recent violence in Northern Ireland, and the impact of the twentieth century modernization and the E.E.C. upon traditional Irish nationalism.

HI 239 HISTORY OF RUSSIA I (3) A survey of Russian civilization from its origins to the mid-nineteenth century. Major themes include: the rise of autocracy, serfdom, and empire, as well as the nature and achievements of Russian culture.

HI 240 HISTORY OF RUSSIA II (3) A survey of modern Russian civilization since 1881. Major themes include: the origins and consequences of the Russian revolutions, the nature of the Soviet system, the achievements of Russian and Soviet culture, and the US-USSR contest for world empire.

HI 300 PROBLEMS IN EUROPEAN HISTORY (3) Significant themes or issues in the evolving process of European Civilization examined in detail. May be taken three times for credit.

HI 305 ENGLAND AND AMERICA IN THE 17th CENTURY (3) Between 1620 and 1642, 58,000 Englishmen left home for the New World, despite its deserved reputation as a death trap. The course will examine in depth the motives both in terms of protest and aspiration of the emigrants, the impact upon them of the wilderness and the Indian, and the emergence of such specifically American institutions as the Puritan family, the town structure, and slavery. Discussion and independent research.

HI 309 THE COLLAPSE OF EUROPE, 1890-1922 (3) The period extending from 1890 to 1922 was witness to one of the most profound and sudden intellectual, cultural and political revolutions in the history of Western Europe. The Intellectual Revolution, taken together with World War I and the Russian Revolution, is often regarded as marking the end of an epoch in European history that started as early as the Renaissance and which took sharper form during the 18th-century Enlightenment. The course focuses attention on the thought of European intellectuals during the period, and on the varying consciousness among them, of a sense of profound cultural change.

HI 315 LIVING AND DYING IN EUROPE, 1610-1870 (3) The course presents an introduction to the patterns of everyday life of ordinary Europeans before and after the "vital revolution" of the 18th century: a revolution which marked the shift from recurrent mortalities to population explosion. The relationship between the exploitation of resources and population in terms of family life, economic distribution, political organization and popular psychology will be examined. Much of the material is recent and controversial. The course will be conducted by discussion and students will be expected to do a considerable amount of independent research.

HI 340 RUSSIA IN REVOLUTION 1900-1921 (3) A study in detail of the revolutionary experience of Russia: three "revolutions" and a civil war within twenty years. The student will study the causes and effects of violent change, the origins for the Soviet state (theory and practice) and the terminology and method of Soviet historiography.

AMERICAN

HI 130 UNITED STATES HISTORY AND GOVERNMENT (3) A survey of the United States history tracing the growth of American institutions and interpreting periods and events of important national significance. Consideration will be given to the causes and results of wars, presidential administrations, great issues and changes in governmental attitudes.

HI 251 AMERICAN COLONIAL HISTORY 1607-1763 (3) The political, economic, and social development of the American colonies; British colonial policy.

HI 253 THE ERA OF THE AMERICAN REVOLUTION 1763-1787 (3) Examines the social, political, economic, religious, and ideological factors which led to the Revolution and which gave it its character. Topics to be treated include: British Colonial policy and its effects; the American setting; the growth of an American identity; the road to Revolution; the "internal revolution"; and the United States under the Articles of Confederation.

HI 255 THE AGE OF JEFFERSON AND JACKSON, 1787-1845 (3) A study of the establishment of the federal system from the Constitutional Convention to the crisis in the union. Specific topics treated will include the emergence of political parties, Jeffersonian and Jacksonian democracy, Expansion and the War of 1812, and the emergence of sectionalism.

HI 257 THE CIVIL WAR AND RECONSTRUCTION, 1845-1877 (3) The causes of the War, the conduct of the war; the attempt at reconstruction in its political, social, and economic aspects;

and national reunification.

HI 260 UNITED STATES HISTORY 1877-1932 (3) An analytical portrayal of the American nation from the post-Reconstruction period through the beginnings of the Great Depression. Themes of study will include American Industrialization, urbanization, Progressivism, and reform, economic development, and the increasingly important role of American involvement in world affairs.

HI 262 UNITED STATES HISTORY, 1932 TO THE PRESENT (3) An analytical portrayal of the American nation from beginning of the Great Depression to the present. Themes of study will include the New Deal, America's entry into World War II, social and economic consequences of the war, the Cold War, the New Frontier and the Great Society, the Vietnam War, the Civil rights and feminist issues, and the rise of conservative America.
HI 266 U.S. SOCIAL AND CULTURAL HISTORY I (3) An examination of American social and cultural developments from the early colonization to the Civil War. Topics to be studied include the religious history of colonial America, changing social and family life, entertainment, the impact of democracy and nationalism on American life, and the workers, north and south.

HI 267 U.S. SOCIAL AND CULTURAL HISTORY II (3) An examination of American social and cultural developments from the Civil War to the present, with projections for the future. Topics to be studied include industrialization, urbanization, immigration, changes in family and social relationships, religion, and a focus on women, Blacks, Indians, and minorities.

HI 268 THE CITY IN AMERICAN HISTORY (3) A study of the American city from colonial times to 1919. The course examines the impact of urbanization upon social and institutional structures. Topics include the rise of the city, transportation revolution, the impact of technology, industrialization, immigration, physical growth patterns, social mobility, reform, and the rise of city planning.

HI 269 THE CONTEMPORARY AMERICAN CITY (3) The American City since 1919 as studied through the forces that have shaped the contemporary city: the automobile, the highway revolution, metropolitan and megalopolis forms, ghettos, suburbanization, and city and regional planning. Particular emphasis will be given to the nationalization of the American City.

HI 270 PROBLEMS IN AMERICAN HISTORY (3) This course will offer readings and/or research in a specific pre-arranged topic in American history. Examples of the topics are sickness and health in American History, the Immigrant Experience, the Depression, etc. This course may be taken three times for credit.

HI 274 MASSACHUSETTS HISTORY TO 1820 (3) An examination of the history and society of Massachusetts from the period before the arrival of whites to 1820. Major topics to be covered include the Puritan experience, Indian-White relationships, the Revolutionary era, Massachusetts under the Articles of Confederation, the early development of industrialization, and the War of 1812 and its aftermath.

HI 275 MASSACHUSETTS HISTORY SINCE 1820 (3) An examination of the history and society of Massachusetts from the early 19th century to the present time. Major topics to be covered include immigration and its impact on Massachusetts, industrialization, urbanization and suburbanization, the cultural flowering of the 19th century, the Civil War, the changing environment and economy, and the impact of technological developments in the post-World War II period.

HI 350 SENIOR SEMINAR: EARLY AMERICAN HISTORY (3) An in-depth research and/or reading experience in early American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, analysis by the instructor. Prerequisite: two 200-level courses in the field or equivalent.

HI 355 SENIOR SEMINAR: 19th CENTURY AMERICAN HISTORY (3) An in-depth research and/or reading experience in 19th century American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, and analysis by the instructor. Prerequisite: two 200-level courses in the field or the equivalent.

HI 360 SENIOR SEMINAR: RECENT AMERICAN HISTORY (3) An in-depth research and/or reading experience in recent American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, and analysis by the instructor. Prerequisite: two 200-level courses in the field or equivalent.

HI 361 INTERNSHIPS IN AMERICAN HISTORY (1-15) A program centering on study and internship in various career fields allied to the study of American History. These may include museum work, historical restoration projects, local archeology, archival work, and historical

editing (editing is limited to 1 credit per semester, a maximum of 3 credits may be earned). While gaining practical work experience through the internship program, the student will also be undertaking a directed research project associated with the area of internship. Prerequisite: permission of director of internships.

HI 365 THE HISTORY OF CITY AND REGIONAL PLANNING (3) The development of the urban planning profession in America is studied from the 1890's to date. The course will analyze planners' responses to rising problems of land use, zoning, housing, suburbanization, environmental problems, highways, strips, malls and the larger requirements of metropolitan and regional need created by the evolution of urban form and structure.

C. NON-WESTERN

HI 150 INTRODUCTION TO NON-WESTERN WORLD (3) Provides a brief survey of the essential elements of the history and culture of the peoples of Asia and Africa. Includes an analysis of the roles played by Buddhism, Confucianism, Hinduism and Islam in developing the unique characteristics of the non-west; and a summary of the major historical events of China, India and Africa, as well as a study of the relations of these countries with each other.

HI 276 THE SPANISH EMPIRE IN AMERICA (3) The course will examine the Spanish discovery and conquest of America from Columbus to the 19th-century revolutions for independence. Focal points will be the existence of the great Indian civilizations; the formation of Spain's American Empire; the Indian receptivity of Spanish culture; and the factors which contribute to the decline and fall of this most extensive of the European empires in the Western Hemisphere.

HI 277 LATIN AMERICAN NATIONS, 1825 TO THE PRESENT (3) The course focuses on the emergence of the Latin American countries, their common characteristics, their struggles for survival in the face of persistent dictatorships and military juntas, and the survival of colonial traditions which have both facilitated and impeded their development in the large community of nations.

HI 282 TRADITIONAL AFRICA TO 1807 (3) The history of Africa is to be surveyed from prehistoric times to 1807. Topics covered will include an introduction to the geography, peoples and culture of the continent. More specialized topics will include studies of pre-historic Africa, Africa and the classical world, formation and history of sudanic and savanna states, Bantu migrations, African states of the east coast, initial European contacts with continent, the slave trade and the beginnings of exploration.

HI 283 CONTEMPORARY AFRICAN HISTORY (3) The second half of the study of the history of Africa will be devoted to a survey of the period from the English and slave trade law of 1807 to the present. Topics covered will include the slave trade of the 19th century and its suppression, exploration of the continent, the impact of imperialism, the formation and administration of colonies, and the nationalist movements. There will be further specialized topics concerning modern Africa such as economic and political development, confrontation between the races, Africa in world affairs, and studies in depth of individual nations.

HI 286 TRADITIONAL FAR EAST (3) A study of the historical and cultural foundations of China, Korea, India, and Japan including their dynastic developments until the Eighteenth century.

HI 287 CONTEMPORARY FAR EAST (3) Western contacts with Asia beginning with the Eighteenth Century, emphasizing the Chinese world view in the History of Asia, including the emergence of Modern China and Japan.

HI 290 PROBLEMS IN NON-WESTERN HISTORY (3) These courses are designed to focus the attention of the student on a specific problem within the scope of historical study the fields of Africa, Asia, or Latin America. The problems will be of contemporary interest; and they will include intensive research, readings, class discussions, and the production of a scholarly paper. The field and problem(s) will be designated prior to the semester in which the course is offered. This course may be taken 3 times for credit.

HI 291 EXPANSION OF EUROPE AND IMPERIALISM (3) The period to be covered will be 1415 to the present. This will include the formation of both the "old" and "new" empires, as well as a study of the modern relations between ex-colony and "mother country." Topics to be covered will be the initial European exploration and colonization of Asia and Africa as well as the "new world." The conflict of European nations leading to the loss of most of the "old" empire by England, France, Spain, Portugal and Holland will be traced. The remainder of the course will be devoted to a study of the causes of the growth of the "new" empire under the general term imperialism.

HI 292 MODERN MIDDLE EAST (3) A survey of the history of the Middle East from the First World War to the present, with special attention to the issues of conflicting nationalisms and change, as well as the significance of modern Islam.

HI 370 PROBLEMS IN AFRICAN HISTORY (3) Intensive guided research and presentations of written results in a scholarly manner on a major topic of historical interest in African studies. Topics such as nationalism, state formation and colonial institutions may be selected depending on research facilities and student interest. The major topic will be designated in advance of registration. The course may be taken three times for credit.

HI 373 MODERN LATIN AMERICA (3) An opportunity to study modern Latin America's struggle with elites, military and civilian juntas, regional pacts, and national security v. human rights since 1950. Lectures and directed readings will provide opportunities for in-depth special interest research and study.

HI 375 UNITED STATES LATIN AMERICAN RELATIONS (3) The course probes the Latin American reponse to questions of U.S. interference and influence of various types, and it will also examine the snared goals of the two areas. Specific examples will be discussed, e.g., the Cuban Revolution, the Panama Canal Treaties, Multinational corporations, United States aid and development projects, and Latin American relations with the non-aligned world.

D. GENERAL

HI 299 HISTORY METHODS (3) An introduction to the methods utilized in teaching history on the high school level, including practical suggestions and clinical experience. This course is required for students seeking secondary school certification in history, and must be completed the semester before the practicum, along with Teaching & Learning.

HI 385 PSYCHOHISTORY (3) To explore the possible relationships between psychoanalytical theory, biography, and historical movements. An examination and evaluation of some of the works on psychohistory and psychobiography will be included. Theoretical questions concerning the relationships between psychobiology, psychoanalytical theory, and biographical traits will be viewed.

HI 399 INDEPENDENT STUDY I, II, III (3) Independent study consists of directed reading and research on an historical subject agreed upon by the student and instructor and approved by the Chair of the Department. Arrangements must be made with the instructor and Chair before registering for this course.

LIBERAL STUDIES PROGRAM

Some students are unable to satisfy their educational goals within the existing structure of academic majors at Westfield State College for several possible reasons:

a) Broad career or educational goals which can only be met by interdisciplinary study.
b) Strong academic interests that cut across departmental lines.
c) A major unavailable in the field of primary interest.

For these students, the flexibility of the Liberal Studies Major offers an opportunity to participate in designing an individual program of major studies which creatively integrates three areas of interest.

In the major, the three areas of concentration are chosen by the student with the approval of a Chair. These areas are not to be chosen haphazardly, but should be interrelated when viewed in perspective with the student's educational goals. For example, a student interested in a career in television reporting might choose Communications-Journalism/Media Studies/Political Science; another with a passion for ancient Greek culture might combine Philosophy/History/Mathematics or Art; and the student interested in theatre production might elect Speech and Theatre/Business Administration/Music. The possibilities for goal-oriented integrated programs are numerous.

The courses within each area of concentration are chosen by the student with the approval of the Chair, and should reflect a coherent, cohesive pattern. In addition, students are encouraged to choose electives in subject areas related to their areas of concentration.

Because of the individualized nature of each major program, special academic strength is expected. Students should have achieved a G.P.A. of 2.5 to be seriously considered for admission.

Students are accepted into the Program only with the consent of the Chair.

REQUIREMENTS FOR THE B.A. IN LIBERAL STUDIES

1. The College Core 40 hours.

2. The Major, consisting of a primary area of concentration, 18 hours; a secondary area of concentration, 15 hours; and a third area of concentration, 12 hours, for a total of 45 hours.

3. Electives totaling 35 hours.

REGULATIONS

1. There are three (3) areas of concentration in the B.A. in Liberal Studies Major, consisting of at least 18, 15 and 12 hours.
2. The areas of concentration may be selected from specific disciplines or from programs either free-standing or subsumed under a particular major which represent specific and distinct subject matters within a particular discipline.
3. Within each area of concentration, the selection of courses should not be random, but should reflect a coherent pattern designed by the student and approved by the Chair.
4. Students are expected to choose areas of concentration which are intellectually complementary.
5. Areas of concentration are restricted to those compatible with a Bachelor of Arts degree, and must be approved by the Chair.
6. Introductory level courses acceptable in the major itself are restricted to two courses.

REQUIREMENTS FOR THE B.S. IN LIBERAL STUDIES

The B.S. is designed to be an intellectually coherent interdisciplinary concentration providing study in two professional disciplines as well as a related liberal-arts area.

1. The College Common Core 40 hours.

2. The Major, consisting of three academic areas, two of five courses, one of four courses, with an additional elective course in any one of the areas for a total of 45 hours. No more than two courses on the introductory level can be taken in the entire major.

3. Electives totaling 35 hours.

REGULATIONS

The courses taken must be drawn from upper-level offerings arranged as below:

Two areas chosen from Business Management, Computer Science, Criminal Justice, and Mass Communication.

And a third area chosen from Economics, Psychology, Sociology, Political Science, Biology, Mathematics, Art, Music, English, History, Philosophy, Modern Foreign Languages, Women's Studies, or Latin American Studies. Appropriate science-oriented Physical Education courses or Education courses which have significant liberal arts components may be accepted. These can be taken from a list provided through the Liberal Studies Program.

WOMEN'S STUDIES MINOR

The Women's Studies Minor is an interdisciplinary program designed to provide students with the theoretical bases for understanding the role of women, both historically and currently, in shaping society's values, beliefs, laws, culture, arts, politics, and other institutions. It follows an integrative model which provides a coherent structure for using existing courses in the college curriculum.

Six courses constitute the minor:

WS 101 Introduction to Women's Studies (required) (3)
WS 301 Seminar in Women's Studies (required) (3)

Four other courses from among electives such as:

CJ 312 Women and the Law (3)
EN 226 Literature By and About Women (3)
MU 104 Women's Role in Music: A History (3)
PH 333 Seminar in Interdisciplinary Studies: "Women as Philosophers and Theorists" (3)
PL 323 Selected Topics in Political Science: "Women and Politics" (3)
PY 356 Special Topics in Psychology: "Psychology of Women" (3)
WS 201 Selected Topics in Women's Studies (3)

Other courses may be designated as Women's Studies electives when appropriate. Students interested in the minor can obtain further information from and apply for admission to the Chair of Liberal Studies. Advising is provided by faculty involved with the minor.

WS 101 INTRODUCTION TO WOMEN'S STUDIES (3) Introduces and develops the idea of Women's Studies as an approach to intellectual inquiry. Addresses a variety of Women's Studies issues in an interdisciplinary format, generally focusing on women's lives and experiences as illuminated by the social sciences and humanities.

WS 201 WOMEN IN MODERN ORGANIZATIONS: (3) Uses an interdisciplinary approach to enhance the understanding of social, ethical, and occupational problems which women face in their work roles within modern organizations. Focuses on strategies for problem-solving within a social and ethical framework with the goal of professional achievement and personal satisfaction within the particular organization. Prerequisites: WS 101 or equivalent.

WS 301 SEMINAR IN WOMEN'S STUDIES: (3) Designed to integrate conceptually and methodologically the major issues addressed by Women's Studies. Each student will complete and present a major research project which demonstrates an understanding of the interdisciplinary nature of women's issues. Prerequisites: WS 101, advanced work in Women's Studies or consent of the instructor.

THE MINOR IN LATIN AMERICAN STUDIES

Consisting of 18 hours, this minor is designed to incorporate perspectives from a wide range of disciplines such as literature, history, women's studies, anthropology and politics. Accordingly, students will take two courses from each of three categories as follows: literature, language and the fine arts; history and philosophy; and the social sciences. The category in which LA 301, Seminar in Latin American Studies, is counted will depend on its topic in a given semester. Courses in addition to those given below may be added as appropriate when they are developed.

Mastery of the Spanish or Portuguese language should be an important goal for those intending to work or to pursue advanced study in an area related to Latin America. For the purpose of this minor students are required, prior to the beginning of the senior year, to attain intermediate-level competency in Spanish or Portuguese as judged by successful completion of the fourth semester of language study or equivalent experience.

List of Courses. Courses for the minor may be chosen from among the following:

HI 277 Latin American Nations, 1825 to the Present (3)
HI 373 Modern Latin America (3)
HI 375 United States-Latin American Relations (3)
HI 399 Independent Studies (3)
LS 200 Spanish Conversation (3)
LS 206 Advanced Oral Spanish (3)
LS 204 Spanish American Civilization (3)
LS 307 Spanish American Literature I (3)
LS 308 Spanish American Literature II (3)
LS 309 Contemporary Latin American Literature (3)
LS 200 Contemporary Latin American Literature in translation (3)
MU 304 Afro-Caribbean Music (3)
PH 300/333 Seminar in Philosophy: Latin American Thought (or Mexican Thought) (3)
PL 328 Third World Politics (3)
PL 330 335 Special Topics: Latin American Governments (3)
MS 316 Special Topics in Mass Communications (3)
LA 301 Seminar in Latin American Studies (3)
(Special topics or independent studies may be offered when their content is appropriate and approved in a given semester).

LA 301 SEMINAR IN LATIN AMERICAN STUDIES: (3) Readings about and discussion of issues, figures, movements, or perspectives on Latin America, to accompany independent research by the student. Topics which integrate various forms of study about the Spanish, Portuguese, and French-speaking peoples of the hemisphere will be emphasized. Prerequisites: introductory work in Latin American-related courses are equivalent.

MASS COMMUNICATION

The objective of the Mass Communication faculty is to provide our students with a strong liberal arts foundation through effective teaching and personal counseling so that each student will be able to develop general perspectives, knowledge, and skills currently employed in the field of communication.

The department faculty offers students the opportunity for more specialized knowledge and skills through the elected concentrations in Communication Management/Marketing, Broadcast Communication, and Journalism.

Graduates of the Mass Communication major have found the curriculum to be a strong foundation for entering graduate school or for entry-level occupations in business, industry, and service organizations.

Graduates work as writers, broadcasters, producers, managers, sales representatives, public relations practitioners, creative personnel, and human resource personnel in virtually all segments of society where effective interpersonal and mass communication knowledge and skills are critical factors of success.

FACILITIES

The department houses a full color television studio, editing suite, darkroom complex, production laboratories, and portable video units. Additionally, the college maintains a student-operated FM stereo radio station.

INTERNSHIPS

The Internship Program in the Department of Mass Communication offers qualified students an opportunity to gain valuable experience with professional mass communication organizations while earning college credit. Experiences vary, depending upon regulations and restrictions that are set by each agency. The Internship Program is divided into three categories: Local, Regional and National, and International Agencies.

Among the available opportunities in public relations/marketing, broadcasting, and journalism are locations in Boston, New York, Hartford, Springfield; London, England; and Dublin, Ireland.

REQUIREMENTS FOR THE MASS COMMUNICATION MAJOR

REQUIRED MAJOR CORE - 18 credits

MC 101 Introduction to Mass Communication (3)
MC 204 Writing for the Mass Media (3)
MC 240 History of Broadcasting (3)
MC 304 Communication Ethics (3)
MC 312 Mass Media Criticism (3)
EN 374 Journalism I (3)

Students Must Elect <u>One</u> of the Following Concentrations

COMMUNICATION MANAGEMENT/MARKETING - 21 credits

MG 203 Principles of Public Relations (3)
MC 303 Propaganda, Persuasion and the Mass Media (3)
MC 320 Foundations of Media Research (3)
MC 340 Organizational Communications (3)
Electives - Nine (9) credits

BROADCAST COMMUNICATION - 21 credits

MC 301 Introduction to Television Production (3)
MC 307 Broadcast Law (3)
MC 330 Broadcast Operations (3)
MC 350 Film as Mass Communication (3)
Electives - Nine (9) credits

JOURNALISM - 21 credits

MC 202 Introduction to Photography (3)
MC 309 Broadcast Journalism (3)
EN 375 Journalism II (3)
EN 394 News Editing (3)
Electives - Nine (9) credits

ELECTIVE LIST

MC 201 Mass Media in the Classroom (3)
FA 211 Visual Communication (3)
MG 221 Business Management (3)
EN 231 History of Journalism (3)
MG 231 Marketing Management (3)
MG 238 Advertising Techniques and Strategies (3)
MC 302 Seminar in Television Production (3)
MC 306 International Media (3)
MC 310 Independent Study (3)
MC 311 Stereotyping in the Mass Media (3)
MC 314 Senior Thesis (3)
MC 316 Special Topics in Mass Communication (3)
MC 318 Production of Instructional Media (3)
MC 333 Television Workshop (3)
MG 335 Marketing Communications (3)
MC 345 TV/Film Production Analysis (3)
EN 367 Film Theory and Criticism (3)
EN 377 Feature Writing (3)
EN 378 Writing for Television (3)
EN 379 News Media Seminar (3)
EN 384 Special Topics in Journalism (3)
EN 393 History and Development of the Motion Picture (3)
EN 395 Speaking on radio and Television (3)

(Concentration requirements may be used as electives)

FIELD PLACEMENT COURSES

The following courses require departmental and/or faculty approval: (credits earned for MC 205 and/or MC 305 may not be substituted for the Required Major Core, Concentration Requirements, or Concentration Electives).

MC 205 Public Relations Aiding (1)
MC 305 Mass Communication Internship (1 - 15)

MINOR IN MASS COMMUNICATION

Students electing a minor in Mass Communication must complete three (3) courses from the Required Major Core and three (3) courses with MC designation.

COURSES

MC 101 INTRODUCTION TO MASS COMMUNICATIONS (3) A survey course in mass communication. Areas of discussion include basic media theory, history of the mass media, basic regulatory systems, and an introduction to the role of media in society.

MC 201 MEDIA IN THE CLASSROOM (3) Designed to acquaint the student with the characteristics of mass media as an instructional tool. Major emphasis will be placed on the use of television, film, and still photography in an educational setting. Evaluation of software will also be covered.

MC 202 INTRODUCTION TO PHOTOGRAPHY (3) Examines various techniques and applications of photography. Areas of study include camera operation, film selection, lenses, filters, lighting, composition, portraits, black and white processing and printing, and manipulation of the image. The history of the medium and its communicative properties are also discussed.

MC 203 PRINCIPLES OF PUBLIC RELATIONS (3) Examines various principles and processes of public relations. Areas of discussion include organizational aspects, the public relations environment, fact finding, planning and programming, implementation, and evaluation. Particular attention will be given to audience targeting.

MC 204 WRITING OR MASS MEDIA (3) An examination of the manner in which messages are constructed for a variety of mass communication formats. Study will be conducted in areas such as print and broadcast journalism, advertising, organizational and political communication, as well as the visual dimensions of film and video. Students will be expected to develop both critical and practical skills in message design, and visual, written, and oral communication. Prerequisite: MC 101.

MC 240 HISTORY OF BROADCASTING (3) Offers an historical and critical perspective of the development of the broadcasting industry in the United States. Specific areas of coverage

include attempts at regulation, early educational broadcasting, the rise of commercialism, the history of networks, and radio and television's "Golden Ages."

MC 301 INTRODUCTION TO TELEVISION PRODUCTION (3) Topics include lighting, camera operation, directing, switching, audio control, and general operation and set up of a studio. Each student will be required to write and direct a ten minute color video tape production. All talent and production crews will be selected from class members. The class is limited to 12 students. Prerequisite: permission of instructor.

MC 302 SEMINAR IN TELEVISION PRODUCTION (3) Designed to give the student an opportunity to conduct in-depth study into particular areas of television production. Students may choose to research a facet of television production or may select one of many genres used by the medium. Students will be required to prepare a formal paper and a 30-60 minute television production for discussion by the seminar. Participation in the productions of the College and assignments at a local broadcast station are requirements of the course (subject to arrangement with the station). Prerequisite: MC 301 and permission of instructor.

MC 303 PROPAGANDA, PERSUASION, AND THE MASS MEDIA (3) Activity involves students in monitoring, selecting and examining advertisements, speeches, editorials, jingles, etc., for the purpose of analyzing and identifying the many techniques and types of propaganda in the media. Details the "Five Pearls of Persuasion" common to media marketing, uses historical models and current case studies on media impact, develops basic analytic skills for testing credibility of media messages. Prerequisite: MC 101.

MC 304 COMMUNICATION ETHICS (3) Examines ethical considerations when applied to the following areas of mass communication: laws and regulations, advertising, delivery systems, institutions, and
social impact. Prerequisite: MC 101.

MC 305 MASS COMMUNICATION INTERNSHIP (1-15) Students, through prior arrangement, will intern at various local, regional, or national media outlets.

MC 306 INTERNATIONAL MEDIA (3) The course will examine various international media systems. Specific countries included are France, West Germany, Belgium, The Netherlands, and Great Britain. Areas of discussion will include financing, control, and corporate structure. This course may be elected in field study form. Prerequisite: MC 101.

MC 307 BROADCAST LAW (3) Examines the decisions of the Federal Communications Commission, the Federal Trade Commission, and the Supreme Court that deal directly with mass media. Case studies of specific decisions will be examined as well as the role of the government in broadcasting. Prerequisite: MC 101.

MC 309 BROADCAST JOURNALISM (3) Areas of discussion to include effective utilization of the immediacy of radio and television, use of audio and video-tape for on the spot coverage, the relationship of word and picture, visual and aural redundancy, adapting other media such as newspapers and wire services to the electronic media, and the role of camera work in generating effective news delivery. Prerequisite: MC 101.

MC 311 STEREOTYPING IN THE MASS MEDIA (3) Examines how various minority groups are portrayed in the media. Includes an examination of the relevant research in media stereotyping and an analysis of the roles of the industry, the government and the public in formulating prevalent stereotypes used in the media. Prerequisite: MC 101.

MC 312 MASS MEDIA CRITICISM (3) Examines criticism of the mass media. The focus of the course will be on such broadcast media as radio and television, the various critical approaches which have been used and the relevance of those approaches today. Students will explore such issues as the early emphasis on appreciation and conventional program reviewing, more recent attempts to use statistical procedures in program analysis, and the collective nature of the media. Prerequisite: MC 101.

MC 314 SENIOR THESIS (3) Offers the student an opportunity to conduct specialized research in mass communication. Evaluation of the work will be conducted by the entire department. An oral defense of the project is required as well as public dissemination of the final written report. Prerequisite: MC 320, senior status, and permission of the department.

MC 316 SPECIAL TOPICS IN MASS COMMUNICATION (3) Examines selected media issues, perspectives, or themes chosen for their timely interest. Prerequisite: MC 101.

MC 318 PRODUCTION OF INSTRUCTIONAL MEDIA (3) Designed to give the student a background of information in the production of posters, charts, graphs, exhibits, models, devices, photographs (sets), transparencies, tape recordings, and the fundamentals of motion picture production. Limited to 16 students.

MC 320 FOUNDATIONS OF MEDIA RESEARCH (3) Examines the various methodologies of media research. Topics will include analysis of various ratings systems, audience survey methods, content analysis, uses and gratifications, and evaluation of current media research. Prerequisites: MC 101 or introductory management course.

MC 330 BROADCAST OPERATIONS (3) Examines the field of broadcast operations. Areas of discussion include staffing, ENG assignments, remotes, programming, FCC forms and regulations, and various responsibilities of broadcast management. Prerequisite: MC 101 or introductory management course.

MC 333 TELEVISION PRODUCTION WORKSHOP (3) Provides students with advanced experience in preparing, structuring, rehearsing, producing, post production, evaluation, and analysis of their own programming. Emphasis will be placed on the subject matter beyond the material covered in MC 301 and MC 302. Prerequisite. MC 302.

MC 340 ORGANIZATIONAL COMMUNICATIONS (3) Concentrates on the process of creating and exchanging messages within a network of relationships in an organization; examines the organization's in-house and public relations as they influence adaptation to the dynamic environment. Includes case studies and current news media reports of communications problems and remedies as applications of communications theory. Prerequisite: MC 203.

MC 345 TV/FILM PRODUCTION ANALYSIS (3) An examination of television and film productions in terms of their managerial, financial, organizational and logistical requirements. Students will analyze and develop cost-effective models for use in television and film production management. Prerequisite: MC 301.

MC 350 FILM AS MASS COMMUNICATION (3) Examines film from a mass communication perspective. Particular emphasis will be placed on the cultural role of film, including economic factors as well as sociological, psychological, political and critical dimensions. An analysis of the impact of technology on the industry will also be conducted. Prerequisite: MC 101.

MC 399 INDEPENDENT STUDY (3-6) Independent study of topics in mass communication under faculty supervision. Prerequisite: permission of instructor and department chair.

MATHEMATICS

Mathematics is a subject with a history which stretches for thousands of years. It has been a major cultural force in Western civilization, serving as the foundation for scientific reasoning and forming the core of the major theories of physical science, as well as determining the direction and content of much philosophic thought. It has supplied substance to economic and political theories, has fashioned major painting, musical, architectural, and literary styles, has fathered our logic, and has furnished some of the best answers we have to fundamental questions about the nature of man and his universe.

Since Mathematics can be studied both as a pure discipline and as an applied discipline, the Department of Mathematics offers a major in mathematics, providing a foundation of pure and applied mathematics (suitable, among other things, for the preparation of high school teachers of mathematics). In addition, we provide courses which satisfy the college Common Core. Seventy percent of the faculty in this department hold terminal degrees in their field.

Students who major in Mathematics may wish to consider careers in actuarial science, secondary education, or further graduate work in mathematics. The study of mathematical sciences also provides a strong foundation for further professional education in a variety of areas.

Also, our Actuarial Preparatory Program recommends a sequence of courses in mathematics, economics, and business administration which are designed to prepare students for successful completion of the first three actuarial examinations.

REQUIREMENTS FOR MATHEMATICS MAJORS

Requirements (36 credits)*

MA 105 Calculus I (3)
MA 106 Calculus II (3)
MA 201 Calculus III (3)
MA 202 Calculus IV (3)

Seven (7) additional 300-level mathematics courses

* Approval by campus governance pending; final action due in Fall 1989

COURSES

MA 103 COLLEGE ALGEBRA (3) First of a two course sequence designed to prepare students for Calculus. Topics include the real number system; inequalities and absolute values: introduction to functions; exponents; linear, polynomial and rational expressions; introduction to graphing: exponential and logarithmic functions. Prerequisite: High School Algebra I.

MA 104 PRECALCULUS (3) Topics covered include an in-depth discussion of functions; graphing; exponential and logarithmic functions; trigonometric functions; and analytic geometry and conic sections. Prerequisites: High School Algebra II or MA 103.

MA 105 CALCULUS I (3) A standard first semester course in the calculus. Topics include functions and limits, the derivative, continuity of functions, differentiation of functions, related rates, differentials and approximations, maxima and minima with applications, the mean value theorem, antiderivatives, the definite integral, and the fundamental theorem of calculus. Prerequisites: high school algebra, geometry, and trigonometry, or MA 104.

MA 106 CALCULUS II (3) A continuation of Calculus I. Topics include evaluation of definite integrals, area, volume, arc length, applications of definite integrals, transcendental functions, techniques of integration, indeterminate forms, improper integrals, Taylor approximations, and an introduction to numerical methods. Prerequisite: MA 105 or equivalent.

MA 108 ELEMENTARY STATISTICS (3) Intended to provide knowledge and computational skill in statistical procedures necessary to apply research techniques to problems in education, psychology, business and social sciences. The topics include nature of elementary statistics, nature of probability, sampling and sampling distributions, problems of estimations, tests of hypotheses, regression and correlation. Elective for non-mathematics majors. Prerequisite: High School Algebra II or MA 103.

MA 109 FINITE MATHEMATICS (3) Compound statements, sets, samples spaces, probability theory, vectors and matrices, Stochastic processes, Bernoulli trials, Markov chains,

applications, introduction to graph theory. Prerequisite: High School Algebra II or MA 103.

MA 110 MATHEMATICAL EXPLORATIONS (3) An exploration of topics from elementary theoretical mathematics, including some of, but not limited to, the following topics: sets, logic, number systems, geometry, elementary number theory, and counting. Designed to give the liberal arts major an appreciation of mathematical reasoning and content. MA 110 and 111 may be taken in any order. Prerequisite: High School Algebra II or MA 103.

MA 111 MATHEMATICAL APPLICATIONS (3) A selection of topics from applied mathematics, including some of, but not limited to, the following topics: probability, statistics, solutions of linear equations and systems of linear equations, linear programming, computer programming, and consumer mathematics. Designed to give the liberal arts major an appreciation of the way in which mathematics can be applied in the real world. MA 110 and 111 may be taken in any order. Prerequisite: High School Algebra II or MA 103.

MA 113-114 MATHEMATICS FOR SCIENCE I and II (6) A two semester course designed specifically for students majoring in Biology and General Science. Emphasis is placed on the application of mathematics to the sciences with measuring, displaying and analyzing data. Lecture topics include measurement, computing techniques and devices, relations and functions, techniques of graphing and curve fitting. The second semester material involves the basic concepts of calculus and their applications to the scientific problems. Lecture topics include limits, differentation, integration, applications of the definite integral, techniques of integration and elementary differential equations. Prerequisite: High School Algebra II or MA 103.

MA 115 MATHEMATICS FOR BUSINESS AND SOCIAL SCIENCES (3) A study of selected topics with particular emphasis on applications in business and social sciences. Topics include sets, probability, solution of equations, systems of linear equations, introduction to linear programming and, as time permits, an introduction to calculus. Prerequisite: High School Algebra II or MA 103.

MA 116 INTRODUCTION TO MATHEMATICAL SYSTEMS (3) Intended as a first course for students planning to major in mathematics. Emphasis in the course is on the structure of mathematical systems and methods of proof. Topics to be considered: logic and the nature of proof, sets, number systems, relations and functions, mathematical systems including groups and fields. Prerequisite: high school algebra, geometry and trigonometry.

MA 118 LINEAR ALGEBRA (3) Study of fundamental concepts of linear algebra over the field of real numbers. Topics include solution of simultaneous linear equations, vector spaces, linear independence and dependence, basis, subspaces, linear transformations and matrices and their properties. Prerequisite: MA 104 or equivalent.

MA 127 CALCULUS FOR BUSINESS AND SOCIAL SCIENCE (3) A study of differential calculus with an emphasis to business and economics. Topics will include: a review of algebra and functions, mathematical modeling, limits and differentiation, techniques of differentiation, max/min problems, graphing, business application, approximation, implicit differentiation and related rates, exponential and logarithmic functions, and growth models in business and economics. Prerquisite: two years H.S. algebra and geometry or MA 104.

MA 150 FOUNDATIONS/SETS AND LOGIC (3) Introductory course in the foundations of mathematics. Topics will include sets, logic, and problem solving. The topics of place value, relations, and functions will also be introduced. Students will develop a conceptual understanding of the course material and, through work with mathematics manipulatives, will explore the pedagogy of the subject. Prerequisite: High School Algebra II or MA 103.

MA 201 CALCULUS III (3) A continuation of Calculus II. Topics include infinite series, conic sections, polar coordinates, parametric equations, Cartesian coordinates in R3, Vectors in R2 and R3, curvature, acceleration, vector valued functions and curvilinear motion, and surfaces in R3. Prerequisite: MA 106.

MA 202 CALCULUS IV (3) A continuation of Calculus III. Topics include cylindrical and spherical coordinates, functions of two or more variables, partial differentiation, directional derivatives and gradients, Lagrange multipliers, iterated integrals, double and triple integrals with applications, vector fields, line integrals and independence of path, Green's Theorem, divergence, Stokes Theorem, and if time permits, an introduction to differential equations. Prerequisite: MA 201.

MA 203 MATHEMATICS IN THE ELEMENTARY SCHOOL (3) Designed to reinforce the mathematical background and to enhance the effectiveness of the prospective elementary teacher. An integral part of the course is an investigation of the content, procedures, and materials

of modern curricula for the elementary school. Prerequisite: MA 150

MA 220 DISCRETE STRUCTURES (3) An introduction to discrete mathematical structures for Computer Science: discrete algebraic structures, algorithms and applications to structural programming and the analysis of algorithms; graphs, digraphs and applications to electrical and scheduling network; lattices, Boolean algebra and applications to switching theory. Prerequisite: CS 120 and MA 118.

MA 237 MATHEMATICS TUTOR TRAINING SEMINAR (1) A training seminar for upper-class students involved with the Mathematics Peer Tutoring Program to meet the following three objectives: 1) presenting mathematics with understanding and flexibility; 2) recognizing, diagnosing, and remediating common math misconceptions, 3) becoming more sensitive to some of the affective issues arising both in tutoring relationships and for students struggling with mathematics. Prerequisite: MA 106, permission of instructor, and concurrent participation in the mathematics tutoring program. May be elected only once for credit.

MA 251 FOUNDATIONS/GEOMETRY (3) The study of the foundations of Geometry and Mensuration. Topics will include topological, projective, and euclidean properties in 2- and 3- space; the development of the concept of measure in 2- and 3- space; and the introduction of measurement formulas. Students will develop a conceptual understanding of the course material and will work with mathematics manipulations. Prerequisite: MA 150 or permission.

MA 252 FOUNDATIONS/PROBABILITY AND STATISTICS (3) The study of the foundations of Probability and Statistics. Topics will include techniques for collecting, tabulating, and analyzing data, using probability principles, construction of histograms, hypothesis testing, and the formulation of inferences using principles of statistics. Students will develop a conceptual understanding of the course material and will work with mathematics manipulations. Prerequisite: MA 150 or permission.

MA 253 FOUNDATIONS/NUMBER SYSTEMS (3) The study of the real number system and its subsets. Topics will include the structure and properties of the whole, integer, rational and real number systems and the application of four-function calculators to problem solving and estimation. Students will develop a conceptual understanding of the course material and will work with mathematics manipulations. Prerequisite: MA 150 or permission.

MA 301 MODERN ABSTRACT ALGEBRA I (3) A study of groups, rings, integral domains and fields, with special emphasis on the real and complex fields. Required of all mathematics majors. Prerequisite: MA 118.

MA 302 MODERN ABSTRACT ALGEBRA II (3) Polynomial rings, vector spaces, linear transformations, elementary theory of matrices and determinants. Required of all mathematics majors. Prerequisite: MA 301.

MA 304 DIFFERENTIAL EQUATIONS (3) Geometric and physical meaning of differential equations. Theory and solution of first, second and higher order linear and non-linear differential equations. Initial and boundary value problems. Finite difference equations. Prerequisite: MA 202 and MA 118.

MA 306 MODERN GEOMETRY I (3) An integrated course consisting of intuitive, synthetic, and analytic approaches to Euclidean and other geometries. Topics will include axiomation foundations, finite geometries, non-Euclidean geometries, and synthetic projective geometry. Prerequisite: MA 118.

MA 307 MODERN GEOMETRY II (3) Geometric and algebraic invariants, groups of transformations, topological, projective, affine and Euclidean transformations. Prerequisite: MA 306.

MA 308 INTRODUCTORY ANALYSIS (3) Topology of real numbers, Cauchy sequences, metric completeness, continuity, compactness, connectedness. Sequence and series and uniform convergence of infinite series. Derivatives and define integrals. Prerequisite: MA 202.

MA 309 INTRODUCTORY TOPOLOGY (3) A simple, thorough survey of the elementary topics of point-set topology of the real line and plane topological spaces; metric spaces; mappings; connectedness; compactness. Prerequisite: Junior/Senior status in the major or permission.

MA 311 THEORY OF NUMBERS (3) Properties of integers including congruences, primes and factorization, continued fractions, quadratic residues, linear diophantine equations and number theoretic functions. Prerequisite: Junior/Senior status in the major or permission.

MA 312 HISTORY OF MATHEMATICS (3) A survey of the development of some of the major factors in modern mathematics, from antiquity to the present. Prerequisites: Junior/Senior status in the major or permission.

MA 323 COMPLEX ANALYSIS (3) Algebra of complex numbers, analytic functions, Cauchy Riemann conditions, conformal mapping, line integrals, Cauchy integral formula, residue integration, Taylor and Laurent series. Prerequisite: MA 202.

MA 333 APPLIED STATISTICS AND EXPERIMENTAL DESIGN (3) A study of the application of computer programming to statistical procedures employed in empirical research and the interpretation of numerical results. Topics in statistics include: introduction to descriptive and inferrential statistics, hypothesis testing, parametric and non-parametric tests (correlation, regression, the t-test, analysis of variance, and factor analysis). The underlying assumptions of several experimental designs will also be examined. Prerequisite: MA 108 or equivalent, and knowledge of at least one scientific programming language.

MA 334 OPERATIONS RESEARCH AND MODELING (3) A study of mathematical modeling and of the models of interest in operations research, which may include distribution problems, linear programming, the simplex method and applications. CPM, network problems, non-linear programming problems, Markov chains, queuing models, and simulation. Prerequisite: MA 118, MA 108, and knowledge of at least one programming language.

MA 335 INTRODUCTION TO NUMERICAL METHODS (3) Intended for majors in mathematics or computer science. Uses the FORTRAN language for numerical computation but no previous knowledge of FORTRAN is assumed. Standard algorithms of numerical analysis will be chosen from: systems of linear equations, differential equations, integration, interpolation, non-linear equations. Prerequisites: MA 118, 201 and knowledge of at least one programming language.

MA 337 FOUNDATIONS OF SECONDARY AND MIDDLE SCHOOL MATHEMATICS (3) Designed to build upon student's mathematics background, relating students' mathematical knowledge to understanding and teaching the middle or secondary school mathematics curriculum. Topics to be considered are: geometry, algebra, basic skills, number theory, probability and statistics and the use of calculators and computers in the classroom. Prerequisites: Junior/Senior status in the major or permission.

MA 340 MATHEMATICAL STATISTICS II (3) Covers mathematical probability theory including: review of set theory, principles of counting, sample spaces and probability functions, random variables, joint probability functions, discrete distributions and continuous distributions. Prerequisite: MA 202.

MA 341 MATHEMATICAL STATISTICS II (3) A systematic treatment of theoretical mathematical statistics assuming preparation in post-calculus probability theory. Topics covered include estimation, hypothesis testing, linear models, non-parametric methods. Prerequisite: MA 340.

MA 399 INDEPENDENT STUDY (1-6) Independent study of topics in mathematics under careful faculty supervision. Intended for capable students to broaden their mathematics program or to gain depth in a particular area of interest. Prerequisite: permission of instructor and Department Chair is required.

MOVEMENT SCIENCE, SPORT AND LEISURE STUDIES

The Department of Movement Science, Sport and Leisure Studies offers a major in Physical Education leading to a Bachelor of Science degree, as well as a wide and diverse selection of theory and activity electives to meet the needs and interests of all students.

Outdoor facilities consist of a synthetic turf and track; softball and baseball diamonds; and tennis courts. The indoor facilities consist of a gymnasium; a six lane swimming pool; dance studio; weight room; and athletic training room.

Physical Education majors must satisfactorily complete the following theory and elective courses:

REQUIREMENTS FOR PHYSICAL EDUCATION MAJORS

Theory Courses
BI 237 Anatomy and Physiology I (3)
BI 239 Anatomy and Physiology II (3)
PE 101 Intro to Physical Ed. (3)
HE 101 First Aid and Emergency Care (1)
HE 201 American Red Cross First Aid and Instructors (2)
PE 202 Intro to Motor Learning (3)
PE 204 Kinesiology (3)
PE 205 Physiology of Exercise (3)
PE 207 Care and Prevention of Athletic Injuries (3)
PE 302 Measurement and Eval. of Physical Education (3)
PE 311 Corrective and Adaptive Physical Education (3)
PE 313 Methods/Materials I Elementary (3) -- OR --
PE 314 Methods/Materials I Secondary (3)

Activity Courses
PE 151 Track and Field (1)
PE 156 Gymnastics (1)
PE 174 Team Sports for Physical Educator (2)
PE 175 Aquatics for Phys. Educator (1)
PE 176 Games I (2)
PE 177 Games II (2)
PE 178 Dance for Physical Educator (1)
PE 179 Racquet Sports for Physical Education (1)

Physical Education Majors seeking teacher certification are required to attain "Advanced Standing" as well as satisfactorily complete the following additional courses:

PY 301 Child Psychology (3) -- OR --
PY 302 Adolescent Psychology (3)
PE 316 Program Planning and Implementation (3)
PE 317 Methods/Materials II Elementary (3) -- OR --
PE 318 Methods/Materials II Secondary (3)
PE 349 Practicum in Physical Education Elementary (12) --OR--
PE 350 Practicum in Physical Education Secondary (12)
PE 355 Practicum Seminar in Physical Education (3)

ADVANCED STANDING REQUIREMENTS FOR TEACHER CERTIFICATION

To achieve "Advanced Standing", the student must submit a completed application (available from advisor) demonstrating satisfactory progress towards the competencies defined below:

A. Academic Record:

(a) At the completion of 60 hours, the student must have achieved a quality point average of 2.3. and (b) At the completion of the 23 semester hours listed below the student must have achieved a quality point average of 2.75.

PE 101 Introduction to Physical Education (3)
PE 202 Introduction to Motor Learning (3)
PE 204 Kinesiology (3)
PE 311 Corrective and Adaptive Physical Education (3)
PE 315 Prevention and Care of Athletic Injury (3)
Required Activities (8) to include PE 176 Games I & PE 177 Games II

B. Student Self-Assessment

All students at the time of requesting "Advanced Standing" must present for consideration

a self-evaluation. See advisor.

C. Faculty Recommendations

To be granted "Advanced Standing," students must be recommended by a "majority" of the Physical Education Department faculty.

COURSES

PE 101 INTRODUCTION TO PHYSICAL EDUCATION (3) Introduction to the history, objectives, literature and organization of the physical education profession, discussions of responsibilities and opportunities of professional personnel. Field Work required.

PE 198 ADVENTURE CHALLENGE INSTRUCTOR (3) The operation, managemnet and design of an Adventure Challenge Ropes Course. This includes liability responsibilities, group process, construction and maintence, safety procedures and technical skill. Satifactory completion will result in one year certification of Adventure Challenge Instructor at Westfield State College.

PE 199 WILDERNESS EXPERIENCES (3) An introduction to wilderness activities which provide participants with a degree of challenge and excitement. Will include current information on the most popular activities, with attention given to the history, equipment needs, travel arrangements, safety and first aid procedures, physical skills, liability problems and environmental concerns. The theories behind these activities and the organizational methods for conducting them, will also be included.

PE 202 INTRODUCTION TO MOTOR LEARNING (3) The study of significant variables which influence motor learning, i.e., transfer, cues, practice, reminiscences, perception, reaction time, motivation, reinforcement, etc. and the analysis of selective variables which affect the acquisition of motor skills. Prerequisite: BI 113.

PE 204 KINESIOLOGY (3) Science of human motion, analysis of leverage in body movement and problems of readjustment in relationship to body mechanics and to physical activity as it is related to an understanding of skillful, efficient and purposeful human motion. Prerequisite: BI 113.

PE 205 PHYSIOLOGY OF EXERCISE (3) Study of the immediate and long range effects of exercise upon the human body. Emphasis on the circulatory and respiratory systems, training, scientific foundations of physical fitness, survey of related research. Prerequisite: BI 113.

PE 221 PHYSIOLOGY OF FITNESS FOR BUSINESS AND INDUSTRY (3) Designed for the analysis of physiological principles and the prescription of exercise for fitness, weight control and health, this course is intended to provide a deeper understanding of fitness programs for individuals and/or groups in business and industrial settings.

PE 230 THERAPEUTIC MODALITIES (3) Examines the use of therapeutic modalities as a component of athletic injury reconditioning programs. Theory, clinical applications and legal aspects are considered. Two lectures, two hour laboratory, weekly. Prerequisites: BI 237, 239, and PE 204.

PE 301 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (3) Philosophy, program planning and methods of teaching children, guided observational experiences of children in schools, presentation of activities suitable in elementary school programs.

PE 302 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION The student will explore the concepts of assessing cognitive, affective and effective learning, emphasizing the latter (acquisition of motor skills) in terms of course objectives. Students will be expected to develop a working knowledge of elementary statistical methods essential to constructing, selecting and administering instruments applicable to physical education, and interpreting the results obtained.

PE 304 PSYCHOLOGY OF COACHING (3) This course concentrates on the principles and techniques applicable to the coaching of sports at the elementary and secondary levels.

PE 305 METHODS OF CONDITIONING IN ATHLETICS (3) Designed to acquaint the student with various physical conditioning programs for athletics. Methods of developing strength, speed, flexibility and cardiovascular endurance such as: isotonic and isometric strength training, interval training, circuit training and aerobics will be discussed. Also discussed will be factors pertaining to physical conditioning such as erogenic aids, diet and nutrition in athletics.

PE 307 PHYSICAL EDUCATION FOR THE SPECIAL CHILD (3) Deals with characteristics, needs and

related problems of the special child associated with their integration into physical education programs. Special attention given to the emotionally disturbed, socially maladjusted, mentally retarded, physically handicapped, culturally deprived, and the gifted child. Prerequisite: Special Education major or permission of instructor.

PE 309 SPORTS MEDICINE II (3) The study of advanced techniques in the evaluation of and treatment of athletic injuries with special emphasis upon the theories and principles of tissue injury and repair. The course includes study of the principles of and the construction of programs for athletic fitness, protective and rehabilitative devices, and the underlying physics, physiological effects, and determination of proper care and use of advanced therapeutic modalities. Prerequisite: PE 204, HE 210, PE 302 or written permission of instructor.

PE 311 CORRECTIVE AND ADAPTIVE PHYSICAL EDUCATION (3) Examination techniques for recognition of atypical conditions, characteristics and problems of atypical selection and adaptation of physical activities to meet individual needs. Prerequisite: PE 204.

PE 312 MOVEMENT AND MUSIC WORKSHOP (3) Creative teaching in movement and music. Course will focus on movement principles and Orff-Schulwerk design for creativity in music. There will be application of the movement principles in Movement Education Program and the design for creativity in music toward the development of elemental experiences in music (sound), rhythm movement, and word. The culmination of activities will lead to the interdisciplinary application of movement, music and literature in the development of sensitivity of expressional media through the creative teacher. Prerequisite: Junior or senior standing or consent of instructor.

PE 313 METHODS AND MATERIALS OF TEACHING MOTOR ACTIVITIES ELEMENTARY (3) Analysis of performance and methods of teaching selected motor activities for the elementary level. Included will be organization, sequencing and progression for teaching skills, fundamental motor patterns and game usage. Practicum experience required. Prerequisite: PE 202.

PE 314 METHODS AND MATERIALS OF TEACHING MOTOR ACTIVITIES SECONDARY (3) Analysis of performance and methods of teaching selected motor activities. Will include drill formation, sequence and progression to teaching skills, in team and individual sports and other physical activities. Practicum experience required. Prerequisite: PE 202.

PE 315 PREVENTION AND CARE OF ATHLETIC INJURIES (3) This course will provide the student with knowledge of the general principles of athletic training. The emphasis of the course will be the prevention and management of sport injuries and conditions.

PE 316 PROGRAM PLANNING AND IMPLEMENTATION (3) Overview of the organizational structure of public schools, the administrative tasks of the physical educator, and the variety of curricular formats offered within the physical education setting. Prerequisites: PE 313 or 314.

PE 317 METHODS AND MATERIALS II ELEMENTARY (3) Students will be involved in experiences with children from public schools in teaching and learning experiences. Students are required to become actively involved in assuming the roles and responsibilities of a professional educator. Prerequisite: PE 313.

PE 318 METHODS AND MATERIALS II SECONDARY (3) Students will be involved in experiences with children from public schools in teaching and learning experiences. Students are required to become actively involved in assuming the roles and responsibilities of a professional educator. Prerequisite: PE 314.

PE 321 SUPERVISING SPORTS PROGRAMS (3) An overview of the objectives, strategies and policies regarding the management of sports programs. Specific learning experiences such as supervision of staff and clients, decision making and planning, goal setting and performance, time management, resolution of conflict, financial considerations and budget preparation, design and maintenance of facilities, selection and maintenance of equipment, legal considerations and public relations will be designed to enhance the individual's technical, human, and conceptual skills.

PE 322 SPORTS AND THE LAW (3) An analysis of the legal considerations in the administration of physical education, health, and sports/athletic programs. Specific law relevant to these programs and how to incorporate consideration of the law into instruction, curriculum development, supervision, staffing, policy formulation, facility design and maintenance, equipment selection and maintenance will be examined.

PE 325 WOMEN AND SPORT (3) Provides an overview of the concerns of women within the social institution of sport. The historical, socio-psychological, and physiological aspects of female sport participation will be examined and discussed. Issues related to the impact of social change within sport upon the female athlete will be addressed. Prerequisite: WS

101, PY 101, or SO 101.

PE 349 PRACTICUM IN PHYSICAL EDUCATION - ELEMENTARY (12) Supervised observation and student teaching in an elementary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school and Physical Education faculty from the college. Individual conferences and group seminars. Prerequisite: Advanced Standing, PE 317 or 318.

PE 350 PRACTICUM IN PHYSICAL EDUCATION - SECONDARY (12) Supervised observation and student teaching in a secondary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school and Physical Education faculty from the college. Individual conferences and group seminars. Prerequisite: Advanced Standing, PE 317 or 318.

PE 351 FIELD WORK (3-12) Provides Physical Education majors with opportunity to do inservice work with public and private agencies in the community. The students will work under the supervision of the agency director and will be supervised by a faculty member from the Physical Education Department. Students will be expected to assist in the development as well as conduct of various physical education programs offered at these agencies. Prerequisite: Physical Education Major with Advanced Standing.

PE 353 CLINICAL EXPERIENCE IN ATHLETIC TRAINING (6-12) Course requires working with a certified athletic trainer in another school for practical experience. Duties to include: administering first aid, administration of therapy treatment, observation of work of the clinical supervisor and duties assigned by the clinical supervisor. Prerequisite: Permission of the instructor.

PE 354 MOTOR DEVELOPMENT: TECHNIQUES AND APPLICATIONS (3) This course will provide the student with the knowledge and skills necessary for the identification and remediation of motor handicaps. The main emphasis will be on the techniques and materials used in a Motor Development Program. Special attention will be given to the impact of recent federal and state regulations and the relationship of motor performance to classroom learning.

PE 355 PRACTICUM SEMINAR/PHYSICAL EDUCATION (3) The practicum seminar is a series of formal meetings to provide an opportunity for student teachers to perceive relationships among ideas in problem situations, to explore creative situations, to increase familiarity with many resources and materials, and to develop wholesome personal and professional relationships. Special programs are presented with the aid of professional resource persons. Identification of educational innovations, problems and suggestions for the present and future needs of students and school personnel are a pertinent part of the practicum experience.

PE 399 INDEPENDENT STUDY (3-6) Individual research and independent study related to a particular phase of Physical Education with approval from the Physical Education Department. Prerequisite: Physical Education Major with Advanced Standing.

HEALTH

HE 100 HEALTH-RELATED FITNESS FOR ADULTS (3) Designed to assist the individual in making sound choices toward preparing and planning a lifestyle conducive to achieving and maintaining total fitness and well-being. Topics include: cardiovasular endurance, muscle strength, muscle endurance, flexibility, diet and weight control, stress management and degenerative disease prevention. Combines the theoretical with the experimental.

HE 101 FIRST AID AND EMERGENCY CARE (1) Provides the fundamental principles, knowledges and skills of first aid and accident prevention. Prepares the individual to care for most injuries and emergencies when medical assistance is delayed. Certification from the National Safety Council will be available upon successful completion of the course.

HE 102 FOOD AND NUTRITION (3) Will include the study of basic principles of nutrition and how the body uses food. Students will be expected to understand recommended daily food allowance and to evaluate individual's habits. The role of vitamins, minerals, fluids, pre-event meals will be discussed.

HE 103 FOUNDATIONS OF HEALTH (3) Study of the basic health problems of college students. Discussions and investigations of current health problems such as drugs, alcohol, smoking, VD and emotional health.

HE 201 AMERICAN RED CROSS FIRST AID AND INSTRUCTORS (2) Includes both knowledge and skills needed to administer first aid and adult CPR as well as to teach First Aid using the guidelines and principles of the American Red Cross. Methodology, history and class

organization will be included. American Red Cross certification will be available upon successful completion of the course (Fee Requirement)

HE 202 COMMUNITY AND SCHOOL HEALTH (2) Develops an understanding of the meaning of health education. Discusses the teacher's role in the school health program, and the ways in which the teacher may work with and gain help from health personnel in the school and community. Prerequisite: HE 103.

HE 301 HEALTH EDUCATION IN THE ELEMENTARY SCHOOL (3) Designed to assist administrators and classroom teachers in evaluating needs of the particular school system and to formulate programs in health education. Emphasis will be on correlation and integration of health instruction. Prerequisite: HE 103 or consent of the instructor.

HE 302 ADVANCED FIRST AID AND EMERGENCY CARE (3) Covers skills and knowledge needed by persons who are likely to give First Aid frequently and will more than likely be responsible for some transportation when medical assistance will be delayed. American Red Cross Certification available.

HE 303 METHODS AND MATERIALS IN HEALTH INSTRUCTION (3) Deals with the most effective methods, procedures and techniques in teaching health. Instructional and curricular materials will be presented along with techniques and current methodology. Sources of materials and agencies which provide assistance will be included. Prerequisite: HE 103 or consent of the instructor.

HE 399 INDEPENDENT STUDY IN HEALTH (3-6) Individual research and independent study relative to a particular health issue. Prerequisite: Permission from the instructor.

RECREATION

RE 101 RECREATIONAL SKILLS (3) A survey of the skills and teaching techniques of a wide variety of sports and games, arts and crafts, drama and literature, music and social activities.

RE 102 INTRODUCTION TO RECREATION AND LEISURE (3) Introduction to the basic concepts, present status of recreation. Overview of the history of the Recreation Movement and its basic philosophy. Field work to be included.

RE 201 TECHNIQUES OF RECREATIONAL LEADERSHIP (2) The theory and practice of leadership techniques specifically applied to the organizing and implementation of recreational activities. Prerequisite: RE 102.

RE 301 OUTDOOR RECREATION (3) An in-depth analysis of outdoor recreational activities. Includes skills of living in nature in respect to wilderness camping and environmental awareness, campcraft skills; planning and conducting outdoor recreation programs. Prerequisite: RE 102, RE 201.

RE 320 ORGANIZATION AND ADMINISTRATION OF RECREATION (3) The course will cover many aspects of recreation: recreation services, factors supporting recreation today, the philosophy of recreation service, the administrative processes-theory and practice along with administration approaches to structure. Also includes the organization of programs, a study of recent laws, major recreation agencies, parks, municipal programs, functions, and management. Prerequisite: Techniques of Recreational Leadership, RE 201, RE 301 Outdoor Recreation (3) and 5 activities (lifetime sports).

OFFICIATING COURSES

PE 121 OFFICIATING MEN'S SOCCER (1)
PE 123 OFFICIATING SOFTBALL (1)
PE 125 OFFICIATING MEN'S BASKETBALL (1)
PE 126 OFFICIATING WOMEN'S BASKETBALL (1)
PE 128 OFFICIATING VOLLEYBALL (1)
PE 130 OFFICIATING FIELD HOCKEY (1)
PE 157 OFFICIATING TRACK AND FIELD (1)
PE 158 OFFICIATING WOMEN'S GYMNASTICS (1)
PE 168 OFFICIATING MEN'S BASEBALL (1)

COACHING COURSES
Prerequisite varsity experience, or skills course in the activity.

PE 209 COACHING VOLLEYBALL (1)
PE 210 COACHING TRACK AND FIELD CROSS COUNTRY (1)
PE 211 COACHING BASEBALL SOFTBALL (1)
PE 212 COACHING BASKETBALL (1)

SKILLS

PE 109 AEROBICS (1)
PE 110 ARCHERY (1)
PE 111 BADMINTON (1)
PE 112 BADMINTON II (1)
PE 114 FITNESS FOR ADULTS (1)
PE 115 BOWLING (1)
PE 120 SOCCER (1)
PE 122 SOFTBALL (1)
PE 124 BASKETBALL (1)
PE 127 VOLLEYBALL (1)
PE 129 FIELD HOCKEY (1)
PE 131 BEGINNERS' SWIMMING (1)
PE 132 INTERMEDIATE SWIMMING (1)
PE 133 SWIMMERS (1)
PE 134 SENIOR LIFE SAVING (1)
PE 137 SKIN AND SCUBA DIVING (1)
PE 138 BOATING AND CANOEING (1)
PE 139 KAYAKING (1)
PE 140 SQUARE DANCING (1)
PE 141 FOLK DANCE (1)
PE 142 MODERN DANCE (1)
PE 143 BALLROOM DANCE (1)
PE 144 MODERN JAZZ (1)
PE 145 BALLET I (1)
PE 146 BALLET II (1)
PE 147 BASIC RHYTHMIC ACTIVITIES (1)
PE 148 TAP DANCE (1)
PE 149 TENNIS (1)
PE 150 TENNIS II (1)
PE 151 TRACK AND FIELD (1)
PE 152 GOLF I (1)
PE 153 GOLF II (1)
PE 154 SKIING I DOWNHILL (1)
PE 155 SKI TOURING AND SNOW SHOEING (1)
PE 156 GYMNASTICS I (1)
PE 160 SELF DEFENSE I (1)
PE 161 SELF DEFENSE II (1)
PE 162 WEIGHT TRAINING AND CONDITIONING (1)
PE 163 BALLROOM DANCE II (1)
PE 164 BICYCLING (1)
PE 165 RACQUETBALL AND HANDBALL (1)
PE 167 CAMPING SKILLS (1)
PE 170 TOUCH FOOTBALL (1)
PE 171 DIVING (1)
PE 172 ORIENTEERING (1)
PE 173 INITIATIVE GAMES AND ROPES (1)
PE 174 TEAM SPORTS FOR THE PHYSICAL EDUCATOR (2)
PE 175 AQUATICS FOR THE PHYSICAL EDUCATOR (1)
PE 176 GAMES I (2)
PE 177 GAMES II (2)
PE 178 DANCE FOR THE PHYSICAL EDUCATOR (1)
PE 179 RACQUET SPORTS FOR THE PHYSICAL EDUCATOR (1)
PE 180 CLIMBING (1)
PE 181 AQUA AEROBICS (1)
PE 182 LIFEGUARD TRAINING (1)
PE 183 RELAXATION TECHNIQUES (1)

MUSIC

The Music Department, in alliance with a liberal arts base, provides the highest standard of practical and theoretical training toward the development of potential in the individual student. The department places the student at the center of its focus. Professional training in musicianship, performance, pedagogy, and literature furnishes an environment in which the abilities of the student can be fully developed. After completing music studies at Westfield State College, the student is well equipped to make choices regarding further professional goals and objectives.

Areas of concentration are provided in Performance, Theory and Composition, Music History, Music Education, Jazz Studies, Musical Theatre, Music Merchandising, and Business Management. The successful completion of the Concentration in Music Education leads toward Certification by the State Board of Education.

Any qualified student may participate in the department's Performance Ensembles. Numerous concerts, recitals, and other productions are presented to the entire community each semester.

The Music Department's facilities consist of an electronic piano laboratory, individual practice rooms (equipped with pianos), a music listening room, a recital room, and practice sound modules. Additionally, there is a growing collection of recordings and cassettes available to students. An impressive collection of texts on music and an expanding collection of music scores are housed in the College Library.

Graduates majoring in music have found careers in church music, in music education, recording engineering, music retailing, profession performance careers outside of the field of Music.

REQUIREMENTS FOR MUSIC MAJORS

MUSIC MAJOR CORE (Total Credits 35)

MUSIC THEORY I (3)
MUSIC THEORY II (3)
BASIC MUSICIANSHIP I and II (1-1) (2)
MUSIC HISTORY I and II (6)

MUSIC INSTRUMENT/VOICE (Levels 1-7) (14)

All Music Majors are required to take one lesson per week on their major instrument, or voice, throughout seven semesters of study. All students enrolled in Major instrument or Voice study must also participate, as available, in a Repertoire Class. There is no additional fee for lessons that are required for graduation, within the Music Major Core, or the student's selected Area of Concentration.

PIANO PROFICIENCY Ø-3

ENSEMBLE (6)

All students must participate in a performing ensemble during each semester enrolled as a Music Major or Music Minor as assigned by the department. To receive credit for any Major instrument or Voice level for the study of Applied Music, all students must pass a jury examination at the end of each semester. Any grade of "Incomplete" received in Applied Music must be made up by the end of the fourth week of the following semester.

RECITAL CLASS (1)

All Music Majors must participate in a musical organization each semester. Details available from Department.

AREAS OF CONCENTRATION

Concentration in Music Education
The student will select the appropriate group of listed courses for the certification sought: Teacher of Music: Elementary (K-9), or Teacher of Music: Secondary (5-12).

All music education concentration students must pass a pre-practicum jury examination in the semester preceeding the practicum. The examination will demonstrate proficiency in conducting, score reading, piano, sight singing, and the major applied area.

Admission to the music education concentration during the forth semester is dependent on: 1) a QPA of 2.7 or higher, 2) completion of 24 hours of the music major core with a QPA of

2.7 or higher, 3) four levels of major applied study with and a QPA of 2.7 or higher, 4) completion of the piano proficiency requirement, and 5) completion of an entrance examination to include music education philosophy, major applied area, basic musicianship, and piano.

Music education concentration students preparing for a practicum experience in instrumental music normally take a traditional concert band or orchetral instrument for the applied major. Students preparing for a practicum experience in vocal music normally take voice for the applied major. Students planning a practicum experience outside their usual performing area must demonstrate performance experience and proficiency equivalent to MU 172 or complete three semesters of minor applied study and ensemble experience in voice or percussion or winds or orchestral strings, as appropriate.

Music (Total Credits 7)

Music Theory* III (3)
Form and Analysis (3)
Voice Class (1) (Voice Majors are exempt)
* Students who also concentrate in Jazz Studies may substitute CONTEMPORARY HARMONIC TECHNIQUES for MUSIC THEORY III

Music Education Core (Total Credits 12)

Introduction to Music Education (1)
Classroom Music in the Public School (2)
Music Supervision and Curriculum (3)
Choral or Instrumental Conducting (3)
Education of the Exceptional Child (3)

Teacher of Music: Elementary (Total Credits 21-24)

Child Psychology (3)
Elementary Music Methods (3)
Instrument Classes (Under Advisement) (Ø-3)
Practicum: Elementary (12)
Practicum: Seminar in Music Education (3)

Teacher of Music: Secondary (Total Credits 23-26)

Adolescent Psychology (3)
Instrumental Music in the Public School or
Vocal Music in the Secondary School (2)
Instrumental Classes (Instrumental Emphasis (6)
(Vocal Emphasis (3))
Practicum: Secondary (12)
Practicum: Seminar in Music Education (3)

Concentration in Performance (Total Credits 3Ø)

Students will Audition for admission into this Concentration; pass a Qualifying Examination before entering the fifth level of Applied Studies; and present a Satisfactory Junior Performance.

Major Instrument or Voice (1Ø)
Music History I or II (3)
Music History Elective (3)
Music Theory III (3)
Music Theory or Composition Elective (3)
Basic Musicianship III (2)
Choral or Instrumental Conducting (3)
Form and Analysis (3)
Senior Recital (Ø)

Concentration in Music History (Total Credits 21)

Music in the Middle Ages and Renaissance (3)
Music in the Baroque Period (3)
Music in the Classical and Romantic Periods (3)
Music in the Twentieth Century (3)
Music Theory III (3)
Form and Analysis (3)
Instrumental or Choral Conducting (3)

Concentration in Theory and Composition (Total Credits 33)

The last three listed courses in the Concentration in Theory and Composition are not required of those students who have a double concentration in music.

For the student in the Theory and Composition Concentration, the fourteen hours required in the Music Major Core in MAJOR INSTRUMENT OR VOICE, will be distributed as follows: MAJOR INSTRUMENT or VOICE (8), MINOR INSTRUMENT/PIANO (4), and ADVANCED COMPOSITION I (2).

Music Theory III (3)
Orchestration (3)
Form and Analysis (3)
Counterpoint (3)
Composition I, II, and III (6)
Instrumental Classes (from two of the following:
(Strings, Woodwinds, Brass, and Percussion) (2)
Choral or Instrumental Conducting (3)
Advanced Music Theory (3)
Advanced Composition II and III (4)
Music History Elective (3)

Concentration in Musical Theatre (Total Credits 27)

Voice Class (1)
Choral or Instrumental Conducting (3)
Musical Theatre Practicum (1-1-1-1) (4)
Music History I or II (3)
Acting I and II (6)
Theatre Workshop (6), or Vocal Techniques (3)
and Theatre Arts (3) (6)
Ballet I and II (2)
Dance: Folk, Modern, Tap, or Jazz (2)

Instrumental Jazz Studies (Total Credits 26)

Jazz/Rock History (3)
Jazz Theory and Analysis (3)
Jazz Improvisation I (2)
Contemporary Harmonic Techniques (3)
Stage Band Arranging I (3)
Stage Band Arranging II (3)
Jazz Ensemble (2)
Jazz Keyboard Harmony I, II, III (3)
Jazz Improvisation II (2)
Jazz Instrument (2)

Vocal Jazz Studies (Total Credits 24)

Jazz/Rock History (3)
Jazz Theory and Analysis (3)
Jazz Improvisation I (2)
Contemporary Harmonic Techniques (3)
Vocal Jazz Techniques (3)
Vocal Jazz Arranging (3)
Jazz Keyboard Harmony I, II, III (1-1-1) (3)
Vocal Jazz Ensemble (2)
Jazz Voice (2)

Music Merchandising and Business Management (Total Credits 31)

Music Theory or Contemporary Harmonic Techniques (3)
Jazz Theory and Analysis (3)
Music History I or II (3)

Instrumental Classes
From: Violin, Trumpet, Clarinet, Piccolo, Guitar (4)
From: Oboe, Flute, Saxophone, Horn, Trombone (3)
Instrumental or Choral Conducting (3)
Introduction to Business Management (3)
Marketing Management (3)
Accounting I (3)
Small Business Management (3)

Music Major - No Specific Concentration

Music Theory and Music History Electives (9)
Ensembles (2)

Music Minor (Total Credits 18)

Music Theory I and II (6)
Major Instrument of Voice (6)
Instrumental or Choral Conducting (3)
Music History I or II (3)

COURSES

THEORY AND COMPOSITION

MU 110 BASIC MUSIC THEORY (3) (non majors) The study of notation, scale construction, intervals, chords, rhythm, and elements of form and counterpoint.

MU 111 BASIC MUSIC THEORY (Majors and Minors) (3) The study of notation, scale, interval and chord construction, rhythm, and elements of melody, form and counterpoint.

MU 112 MUSIC THEORY I (3) A continuation of Basic Music Theory (MU 111) with study of Inversions, Nonharmonic Tones, Harmonic Rhythm, Modulations, Dominant Seventh Chords, the Principles of Secondary Dominants, and simple descriptive analysis. Continued exploration of melodic structure, and musical texture.

MU 113 BASIC MUSICIANSHIP I (1) Elementary solfege, rhythm exercises, musical dictation, and musical terms in Italian and German.

MU 114 BASIC MUSICIANSHIP II (1) Intermediate solfege, rhythm exercises, musical dictation, and musical terms in the French language. Prerequisite: MU 113.

MU 211 MUSIC THEORY II (3) Emphasis is upon the study of extended chords, sequence, and chromatic harmonies. Continued development of analytical techniques. Prerequisite: MU 112.

MU 212 MUSIC THEORY III (3) Emphasis is upon late Romantic and Twentieth-Century Harmonic Techniques. Also, an introduction to the experimental techniques of Contemporary Music, and continued concern for the development of analytical techniques. Prerequisite: MU 211.

MU 213 BASIC MUSICIANSHIP III (2) Advanced solfege, rhythm exercises. Interpretation of scores through formal analysis. Prerequisite: MU 114.

MU 214 COMPOSITION I (2) An introduction to basic compositional techniques in music. Creative work in smaller forms. Prerequisite: MU 112.

MU 215 COMPOSITION II (2) Emphasis is upon varied instrumental and vocal media. Includes an introduction to Twentieth-Century Compositional Techniques. Prerequisites: MU 211 and MU 214.

MU 216 COMPOSITION III (2) Emphasis is upon individual projects. Performance of original works will be encouraged. Prerequisites: MU 212, and MU 215.

MU 217 ORCHESTRATION (3) A study of the technical aspects of each instrument to include ranges, and transposition. Score analysis and arranging for various combinations of instruments. Prerequisites: MU 112, and Instrument Classes.

MU 310 COUNTERPOINT (3) A review of species counterpoint will lead to a study of tonal counterpoint in the style of the 18th Century. Analysis of representative works will complement the written work in from two to four voices, culminating in efforts in such forms and techniques as the invention, canon, invertible counterpoint, and fugue. Prerequisite: MU 112.

MU 311 ADVANCED MUSIC THEORY (3) Continuation of Music Theory III with special focus upon the works of contemporary theorists, and the application of their concepts and principles to music of all periods and styles. May be repeated for credit. Prerequisites: MU 212 and MU 312.

MU 312 FORM AND ANALYSIS (3) An introduction to the analysis of musical forms. Works analyzed: 17th century to late 19th century compositions. Prerequisite: MU 212.

MU 314 ADVANCED COMPOSITION I (2) Continuation of Composition III. Performances of original works will be required. Prerequisite: MU 312.

MU 315 ADVANCED COMPOSITION II (2) Continued study in Music Composition, with emphasis upon extended works for larger ensembles. Prerequisite: MU 314.

MU 316 ADVANCED COMPOSITION III (2) The final semester in Composition. Concern for the presentation of a public recital and/or the development of a portfolio of compositions. Prerequisite: MU 315.

MU 317 CHORAL ARRANGING (3) The development of arranging techniques for the choral ensemble. Attention is devoted to harmonic arranging for both accompanied and unaccompanied female, male, and mixed ensembles. Attention to contrapuntal aspects of the choral arranging process. Prerequisites: MU 212 and MU 310.

MU 399 INDEPENDENT STUDY (Theory and Composition) (3-6)

MUSIC HISTORY, LITERATURE, AND APPRECIATION

MU 101 MUSIC APPRECIATION (3) The study of masterpieces of music from each era, from the Middle Ages through contemporary times. Emphasis is on directed listening and music is analyzed with reference to style characteristics.

MU 103 MUSIC APPRECIATION (Music majors) (3) The study of music of each era, from the Middle Ages through contemporary times. Music is analyzed through directed listening, through the use of musical scores, and with reference to style characteristics.

MU 102 MUSIC IN AMERICA (3) A survey of music in America from the landing of Columbus through the Twentieth Century.

MU 104 WORLD MUSIC (3) A survey of World Music literature including the music of non-Western cultures China, India, and the Near East; the tribal music of Africa and its influence on the music of South America and the Caribbean area; the lesser known music of the Western world including Iceland, Ireland, and the Indians of America. Designed for Honors students of the college. Prerequisite: MU 101 or permission of instructor.

MU 106 WOMEN'S ROLE IN MUSIC: A HISTORY (3) The course will trace women's involvement in the field of music and include the study of women composers, performers, musicologists, educators, and women as patrons of the arts.

MU 160 HISTORY OF JAZZ (3) The study of jazz music from the early 1900's to the present. Emphasis on styles and trends of major jazz performers and ensembles within each period.

MU 200 MUSIC HISTORY I (3) A chronological study of the history of musical styles showing the development of musical forms from the Middle Ages through the Baroque Era.

MU 201 MUSIC HISTORY II (3) A continuation of Music History I. The study of musical forms as developed from the Classical Era through the Twentieth Century.

MU 300 MUSIC IN THE MIDDLE AGES AND RENAISSANCE (3) A chronological study of forms and styles of Western Music from Antiquity through the Sixteenth Century. Prerequisite: MU 103, 200, & 201 or permission of the Instructor.

MU 301 MUSIC IN THE BAROQUE ERA (3) The history of music from 1600 to 1750 with emphasis on the musical styles of Monteverdi, Bach, and Handel. Prerequisite: MU 103, 200, 201 or permission of the Instructor.

MU 302 MUSIC IN THE CLASSIC AND ROMANTIC ERAS (3) A study of the forms and styles of music from 1740 to 1900. Prerequisite: MU 103, 200, 201 or permission of the Instructor.

MU 303 MUSIC IN THE TWENTIETH CENTURY (3) A study of changing styles of music from the late German Romanticists through the experimental music of contemporary times. Prerequisites: MU 103, 200 and 201 or permission of the Instructor.

MU 304 AFRO-CARIBBEAN MUSIC (3) Music of Puerto Rico and the Caribbean Islands. A study of the influences of Spanish, African and Indian music on the music of Puerto Rico, and its influence on the music of America. Course is especially designed for the classroom teacher. Prerequisite: MU 101 or 103.

MU 399 INDEPENDENT STUDY (Music History) (3-6)

MUSIC EDUCATION

MU 120 INTRODUCTION TO MUSIC EDUCATION (1) An introductory experience in music education for prospective music teachers. The course consists of lectures, group discussions,and field experiences. Observations and interactions with students and music educators in

public schools. Recommended for Spring Semester of the Freshman Year.

MU 220 MUSIC IN THE ELEMENTARY SCHOOL (3) A course designed for the non music major. Introduces the materials and techniques with which the elementary education major may guide young children in musical experiences. Emphasis is on the development of musical knowledge and teaching skills.

MU 221 INSTRUMENTAL MUSIC IN THE PUBLIC SCHOOLS (2) The study of a comprehensive instrumental program at the elementary and secondary school levels. Attention is given to recruitment procedures, establishing instrumental classes, selection of instructional materials and literature, organizing and developing large and small ensembles and evaluative techniques. Field experience in public schools will be required. Prerequisites: MU 120, and a minimum of four semester hours in Instrument Classes.

MU 320 CLASSROOM MUSIC IN THE PUBLIC SCHOOLS (2) A lecture/laboratory experience designed to develop a program of required and elective music classes at the junior-senior high school levels. Attention to the planning, organization and implementation of classes in general music, music theory, music listening and the related arts. Assignments at area public schools are required. Prerequisites: MU 120, 101, 200 or 201, and 211. Also, Piano Proficiency, and PY 301, or PY 302.

MU 321 VOCAL MUSIC IN THE SECONDARY SCHOOLS (2) A study of vocal music activities in the public schools, from the middle-school level through the senior high school. The course/field experience prepares students to organize and develop a choral program, analyze and evaluate choral literature, and prepare for rehearsals and performances. Prerequisites: MU 120, 156, 274 Major Instrument V/Voice and Piano Proficiency.

MU 322 ELEMENTARY MUSIC METHODS (3) A survey of music literature, materials and current teaching techniques appropriate for the elementary school vocal music program. Consideration is given to identifying goals and developing sequential musical experiences. Assignments in area public/private schools will be required throughout the semester. Prerequisites: PY 301, MU 156, Piano Proficiency, and MU 120.

MU 323 MUSIC SUPERVISION AND CURRICULUM (3) The principles underlying a comprehensive education program from kindergarten through the senior high school. This course deals with staffing, curriculum development, evaluation, scheduling, finance and public relations. Prerequisites: MU 322, 321, and 320.

MU 324 PRACTICUM: MUSIC, ELEMENTARY (12) A variety of teaching experiences in a public school at the elementary school level under the supervision of a cooperating practitioner and a college professor. A full semester will be devoted to the practicum, and more than one half of the assignment must be at the elementary level in order to qualify for elementary certification. Conferences are scheduled regularly as part of the growth and evaluation process. Corequisite: MU 326. Prerequisites: Completion of all required music education courses for Elementary Certification.

MU 325 PRACTICUM: MUSIC, SECONDARY (12) A variety of teaching experiences in a public school at the secondary level under the supervision of a cooperating practitioner and college supervisor. The student will devote a full semester to the practicum. More than one half of the assignment must be at the secondary level in order to qualify for secondary certification. Conferences with cooperating practitioner and college supervisor are scheduled regularly as part of the growth and evaluation process. Corequisite: MU 326. Prerequisites: Completion of all Music Education Courses required for Secondary Certification.

MU 326 PRACTICUM: SEMINAR IN MUSIC EDUCATION (3) Formal meetings of students concurrently engaged in Practicum: Music, Elementary or Secondary. Lectures and group discussions will center on the assessment of student teacher needs, methodologies, and the development and articulation of a personal philosophy of music education. Prerequisites: Completion of all Music Education courses required for Elementary, or Secondary Certification.

MU 399 INDEPENDENT STUDY (Music Education) (3-6).

CONDUCTING

MU 330 CHORAL CONDUCTING (3) The development of conducting techniques in relation to rhythmic/melodic exercises. Basic techniques of choral conducting, voice production, choral literature and performance practices. Prerequisites: MU 201 and 211.

MU 331 INSTRUMENTAL CONDUCTING (3) Conducting and score reading of standard orchestral repertoire. Attention is given to the broader aspects of style, interpretation, terminology, transposition and the detailed aspects of baton technique. Prerequisites: MU 201, 211, and Instrument Classes.

MU 399 INDEPENDENT STUDY (Conducting) (3-6).

PERFORMING ENSEMBLES

MU 140 CHORALE (1) Membership by audition. Mixed voices emphasizing the A Cappella Tradition the Chorale also performs with orchestra. Extensive performance schedule on and off campus. Literature spans all periods of music history. The Chorale tours every spring. May be repeated for credit.

MU 141 COLLEGE CHORUS (1) Mixed voices, no audition required. Performs on and off campus at least twice each semester. Literature covers all periods of music history with emphasis on major works. May be repeated for credit.

MU 142 MADRIGAL SINGERS (1) Mixed voices, by audition. Music for small ensemble from all periods of music history. Emphasis on the Renaissance Period and A Cappella singing. May be repeated for credit.

MU 143 THE WIND SYMPHONY (1) Open to all qualified students through the successful completion of an audition. Dedicated to the finest in wind-instrument repertory. Several concerts, both on and off campus each year. May be repeated for credit.

MU 144 ORCHESTRA (1) A College-Community Ensemble which is open to all students and interested musicians from the Greater Westfield Area. Performance of standard orchestral literature. A performance each semester. May be repeated for credit.

MU 145 JAZZ ENSEMBLE (1) A group of instrumentalists who perform arrangements in the Jazz and other popular idioms. By audition only. May be repeated for credit.

MU 146 JAZZ VOCAL ENSEMBLE (1) A group of sixteen singers and instrumentalists who perform arrangements in the Jazz and contemporary idioms. Semi-choreographed. By audition only. May be repeated for credit.

MU 240 CHAMBER ENSEMBLES (1) By special arrangement. Small ensembles structured according to student interest and available faculty expertise. Recently offered: Brass Quintet, Woodwind Quartet, Accordion Ensemble, Percussion Ensemble, Trombone Choir, Horn Ensemble, Opera Workshop and others. May be repeated for credit.

INSTRUMENTAL CLASSES

MU 150-151, 250 PIANO CLASS (non majors) (1-1-1) (Beginner, Intermediate, Advanced) Class instruction for students with little or no keyboard experience. Emphasis is on developing functional skills at the keyboard and the ability to interpret musical notation.

MU 152-153, 252 PIANO CLASS I-III (for Music Majors) (1-1-1) A keyboard class designed to develop practical playing skills. Begins with emphasis on fundamental piano techniques, moves through emphasis on chording, accompanying, and improvising and sight reading, and concludes with the learning of assigned compositions and the development of transpositional skills.

MU 154 WOODWIND CLASS (1) The focus will be on either Flute, Oboe/Bassoon, Clarinet, or Saxophone. Involves classroom study of the particular instrument through practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of embouchure, fingerings, breathing and tone production, as they apply to the particular instrument being studied.

MU 155 BRASS CLASS (1) (Trumpet, Horn, Trombone, or Tuba) Classroom study of the particular instrument through practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of embouchure, fingerings, breathing and tone production as they apply to the particular instrument being studied.

MU 156 VOICE CLASS (1) A course designed to meet the needs of the non-voice major in the music major program. The class is conducted in the form of a vocal laboratory, in which the students work on the development of skills necessary for good singing.

MU 157 PERCUSSION CLASS (1) The study and acquisition of skills applicable to the various instruments of the percussion section.

MU 158 STRING CLASS (1) (Violin, Viola, Violoncello, or String Bass) Classroom study on a particular instrument. Practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of bowing, fingerings, and tone production as they apply to the particular instrument.

JAZZ STUDIES

MU 260-263 JAZZ INSTRUMENT OR VOICE I-IV (2-2-2-2) Study on the student's principal instrument of the techniques and stylistic considerations in the performance of Jazz. Prerequisite: MU 174-177.

MU 264 JAZZ THEORY AND ANALYSIS (3) The study of jazz techniques and fundamentals including: improvisation, scales, chords, and rhythmic interpretation of jazz phrases. Prerequisite: MU 111.

MU 266 SMALL GROUP JAZZ WORKSHOP (1) The study of Jazz literature, current improvisational techniques and the performance practice made popular by the so-called "jam session."

MU 267-268 JAZZ KEYBOARD HARMONY I-II (1-1) Classroom piano instruction for students interested in jazz. Emphasis on II-V-I progressions, Blues forms, and other chord functions. Prerequisite: MU 264.

MU 360-361 STAGE BAND ARRANGING I-II (3-3) A study of writing techniques for jazz ensembles, rock groups, and other ensembles. Prerequisites: MU 264 and MU 364.

MU 362-363 JAZZ IMPROVISATION I-II (2-2) Classes for developing skills in harmonic, melodic, and rhythmic improvisation through performance. Prerequisite: MU 264.

MU 364 CONTEMPORARY HARMONIC TECHNIQUES (3) Twentieth century chordal structures including extended chords, chromatic harmony, and harmonic substitutions. The keyboard will be used and all scoring will be for piano. Prerequisites: MU 211 and MU 264.

MU 365 JAZZ VOCAL TECHNIQUES (3) A class for developing Jazz vocal phrasing, interpretations, and style. Scat singing is emphasized.

MU 366 JAZZ VOCAL ARRANGING (3) A class for developing writing skills for Jazz vocal solos, duets, small and large ensembles. Notation is emphasized.

MU 367 CHORD SCALES (2) The advance study of chord extensions, substitutions and alterations relating to scales and melody for use in instrumental solo playing and arranging. Prerequisites: MU 110, MU 111, MU 262, & Mu 362.

MU 399 INDEPENDENT STUDY (Jazz Studies) (3-6)

APPLIED MUSIC STUDIES
Private music lessons, required of all music majors and music minors, are provided by the Applied Music Studies Faculty. Music Majors are exempt from applied music instruction fees for those hours specifically required for graduation, within their individual programs.

A PREREQUISITE to all first-year MAJOR INSTRUMENT OR VOICE study is a satisfactory entrance audition. MAJOR INSTRUMENT OR VOICE study is undertaken by each student in relation to one instrument from the following list:

Flute
Piano
Oboe
Organ
Clarinet
Accordion
Bassoon
Harpsichord
Saxophone
Classical Guitar
Horn
Trumpet
Trombone
Euphonium
Tuba Percussion
Violin
Viola
Violoncello
String Bass
Voice

MINOR INSTRUMENT OR VOICE levels listed below are generally taken only for elective credit. Any of the above instruments may be elected for Minor study. Syllabi which detail the requirements for each level are available through a separate departmental publication. MINOR INSTRUMENT OR VOICE study does not require a Jury Examination at the end of each semester.

MU 170-173 MINOR INSTRUMENT OR VOICE I-IV 1-1-1-1
MU 270-273 MINOR INSTRUMENT OR VOICE V-VIII 1-1-1-1

Syllabi which detail the requirements for each level of MAJOR INSTRUMENT OR VOICE are available through a separate departmental publication. A Juried Examination is required for the completion of each level.

MU 174-177 MAJOR INSTRUMENT OR VOICE I-IV 2-2-2-2
MU 274-277 MAJOR INSTRUMENT OR VOICE V-VIII 2-2-2-2
MU 374-377 MAJOR INSTRUMENT OR VOICE IX-XII 2-2-2-2

MU 278 RECITAL CLASS (1) Application of platform deportment, and performance experience. Attention is given to aspects of programming works for recitals and concerts.

MU 378 SENIOR RECITAL (Ø) Complete public recital of solo and ensemble (optional) literature from the standard repertoire (sixty minutes minimum playing duration). Prerequisite: A satisfactory Junior Performance; prerequisite to the Junior Performance is a Satisfactory Qualifying Examination.

MUSICAL THEATRE

MU 18Ø MUSICAL THEATRE PRACTICA (1) Participation for a semester in the Musical Theatre Guild production, in one of the following capacities: (a) Director, Musical Director, Choreographer, or Conductor, (b) Major or minor lead part, (c) Chorus plus serving on one crew. May be repeated for credit. Prerequisite: Enrollment in the Musical Theatre Concentration.

MU 399 INDEPENDENT STUDY (Musical Theatre) (3-6).

PHILOSOPHY

PHILOSOPHY MINOR

Students who wish to add significant philosophic depth to their undergraduate program may take a minor in Philosophy.

The philosophy faculty intends to provide courses to achieve the following:

* opportunities in all offerings for insight into and the methods for rigorous, carefully articulated, dynamic criticism of ideas and theories in general
* detailed, multi-level treatments of certain well-defined and traditionally important areas of thought such as political and social philosophy, ethics, logic, religion, philosophy of science, and philosophies of the human sciences
* a comprehensive range of courses outlining the development of Western philosophies and identifying significant thinkers, with a particular emphasis on modern and contemporary implications
* frequent and thorough analyses of issues which can utilize fruitfully and provocatively interdisciplinary perspectives and the application of antithetical as well as complementary theories of knowledge
* study of issues in ways which heighten and promote the continued vitality of a liberal arts education, especially the analytical and critical breadth which the humanities provide.

The Department expects to advance these goals in part by often scheduling courses on topical and timely subjects.

The courses which follow are divided into three levels, varying by degree of difficulty and requirements for entrance. Level One courses have no prerequisites and are open to all students in the College. Level Two courses generally have some form of prerequisite, though under special circumstances these may be waived. Level Three courses usually contain more difficult material; prerequisites should be expected, though not necessarily only in philosophy. In all cases, however, the instructor may waive prerequisites so as to give students opportunities to undertake a serious intellectual challenge.

PH 101 INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY (3) Introduction to philosophy through consideration of topics such as individualism, order vs. freedom, values within contemporary social movements, foundations of social and political life, and analyses of modern culture as expressive of social and political ideas. Special attention given to the fundamentals of critical analysis.

PH 102 INTRODUCTION TO ETHICS (3) Introduction to philosophy through consideration of classic and contemporary moral issues. Topics such as moral relativism, responsibility, the bases of systems of justice, moral consistency, and the structure and applications of ethical systems. Special attention given to the fundamentals of critical analysis.

PH 103 SYMBOLIC LOGIC I (3) Introduction to the principles and techniques of standard deductive logic: the nature of reasoning, argument, and inference; truth and validity; the application of logical rules to alternative types of deductive proof; the limits of sentence logic and an introduction to predicate logic. Attention given to the application of logic to other disciplines.

PH 104 GREAT PHILOSOPHICAL ISSUES (3) Introduction to philosophy through consideration of historically recurrent themes such as materialism, mysticism, idealism, rationalism, and empiricism. Special attention given to the fundamentals of critical analysis and the interpretation of original sources.

PH 107 MAJOR RELIGIONS OF THE WEST (3) Introduction to the history and the major doctrines of Christianity, Islam, Judaism, and Zoroastrianism. Special attention given to fundamentals of philosophical analysis of religious beliefs.

PH 108 MAJOR RELIGIONS OF THE EAST (3) Introduction to the history and major doctrines of Buddhism, Confucianism, Hinduism, Jainism, Shinto, Sikhism, and Taoism. Special attention to the fundamentals of philosophical analysis of religious beliefs.

PH 110 INTRODUCTION TO PHILOSOPHY OF SCIENCE (3) Introduction to classical and contemporary scientific world views and their respective philosophies of nature. Topics such as comparative studies of major scientific revolutions. Special attention given to the fundamentals of philosophical analysis of scientific theories.

PH 200 SPECIAL TOPICS IN PHILOSOPHY: (3) Careful analytical treatment of selected philosophical issues, perspectives, or themes chosen for their timely interest. Significant topics such as Marxism, Eastern philosophies, myth and reality, minds and machines, and philosophy and the arts (music, film, drama, literature, painting, design,

or sculpture; aesthetics). Prerequisite: 100-level philosophy course or equivalent.

PH 201 ANCIENT PHILOSOPHY (3) Reading and discussions of such ancient thinkers as the pre-Socratics, Socrates, Democritus, Plato, and Aristotle. Special attention to a) organizing ancient philosophical thought by examining historically recurrent themes and b) considering dominant perspectives such as Ionian nature-philosophy, atomism, skepticism, and Pythagoreanism. Prerequisite: 100-level philosophy course or equivalent.

PH 202 MODERN PHILOSOPHY: 15TH TO 18TH CENTURIES (3) Reading and discussion of selected major Continental and British thinkers of the period such as Cusanus, Bacon, Descartes, Pascal, Locke, and Kant. Special attention given to a) organizing early modern philosophical thought by examining historically recurrent themes and b) considering crucial developments such as the New Physics, the tensions of form and experiment, and the conflict between reason, doubt, and revelation. Prerequisite: 100-level philosophy course or equivalent.

PH 203 MODERN PHILOSOPHY: THE 19TH CENTURY (3) Reading and discussion of selected major Continental and British thinkers of the century such as Hegel, Marx, Kierkegaard, Nietzsche, Darwin, and Mach. Special attention to a) organizing 19th-century philosophical thought by examining historically recurrent themes and b) considering trends such as Romanticism, Marxism, subjectivism, naturalism, and mechanism. Prerequisite: 100-level philosophy course or equivalent.

PH 206 SYMBOLIC LOGIC II (3) Careful treatment of predicate logic through the theory of relations. Introduction to philosophical logic by consideration of alternative theories of consistency and proof. Some recent investigations of the nature and varieties of paradox and their impact on reasoning and inference. Special attention given to the applications of such logics to artificial, natural, and expressive languages. Prerequisite: PH 103 or its equivalent.

PH 209 PHILOSOPHY OF RELIGION (3) Careful analytical treatment of the various problems of religious discourse. Significant topics such as the problem of the existence of god (or gods), the nature of religious experience, and the question of revelation. Prerequisite: PH 107, PH 108, or equivalent.

PH 212 PHILOSOPHY OF SCIENCE (3) Careful analytical treatment of the conceptual foundations of scientific thought. Topics such as space, time, and relativity; determinism and indeterminism; causality and chance; alternative views of explanation, theory construction, truth. Special attention given to examples selected from mathematics and/or physical sciences. Prerequisite: PH 110 or its equivalent.

PH 213 PHILOSOPHY AND MODERN ORGANIZATIONS: (3) Careful analytical treatment of selected modern institutions so as to understand their philosophical presuppositions, ethics, languages, orders, and impact on and view of the person. Topical consideration of agencies, professions, and social groups such as those involved with medicine, the law, business, psychiatry and psychology, education, and government. Under this course number might appear bio-medical, media, scientific, or legal ethics; philosophies of law or of jurisprudence, etc. Prerequisite: 100-level philosophy course or equivalent.

PH 214 PHILOSOPHY OF THE SOCIAL SCIENCES (3) Careful analytical treatment of knowledge in the social sciences. Comparisons with scientific criteria emphasized. Special attention given to relations between philosophical and social commitments and social-scientific methodologies. Prerequisite: 100-level philosophy course or equivalent.

PH 215 AMERICAN PHILOSOPHY (3) Reading and discussion of selected major American thinkers such as Cotton Mather, Edwards, Royce, Peirce, William James, Dewey, and Santayana. Special attention given to a) organizing American philosophical thought by examining historically recurrent themes (including the various religious, socio-cultural, and metaphysical views of the person, the group, knowledge itself, and ultimate-value systems advanced by such philosophers) and b) considering perspectives such as idealism, utilitarianism, pragmatism, individualism, naturalism, and positivism. Prerequisite: 100-level philosophy course or equivalent.

PH 216 CONTEMPORARY PHILOSOPHY (3) Reading and discussion of selected thinkers of the 20th Century such as Sartre, deBeauvoir, Heidegger, Wittgenstein, Russell, Whitehead, and the "Vienna Circle." Special attention given to a) organizing contemporary philosophical thought by examining historically recurrent themes and b) considering perspectives such as existentialism, phenomenology, analytic philosophy, philosophies of language, and philosophies of liberation. Prerequisite: 100-level philosophy course or equivalent.

PH 217 PHILOSOPHY AND FILM: Study of film esthetics and concepts in selected movies and related intellectual movements, thinkers, or film-makers. Special emphasis on those informed by philosophical movements such as existentialism, Marxism, modernism, or

postmodernism. Topics drawn from cinema dealing with ethics, social and political philosophies, religious themes, or modern metaphysics, with attention to film criticism written by 20th century thinkers with philosophical training and interests. Prerequisites: 100-level philosophy course or equivalent.

PH 300 SEMINAR IN PHILOSOPHY: (3) Intensive analysis of selected issues, problems, figures, or areas in philosophy. Prerequisite: 200-level philosophy course or consent of instructor.

PH 304 SEMINAR IN INFERENCE AND INQUIRY: (3) Intensive analysis of the structures of inference and modes of inquiry in the formal, empirical, or human sciences. Topics selected from the mathematical, physical, biological, and social sciences. Special attention given to the logical, methodological, and epistemological status of models, laws, paradigms, and theories. Prerequisite: 200-level philosophy course or consent of instructor.

PH 305 SEMINAR IN VALUE THEORY: (3) Intensive analysis of selected issues, problems, figures, or areas concerned with topics such as free choice, "right action," personal commitment, systems of values, and socio-cultural norms. Prerequisite: 200-level philosophy course or consent of instructor.

PH 306 SEMINAR IN RELIGIOUS STUDIES: (3) Intensive analysis of selected issues, problems, figures and areas within the history and in the philosophical consideration of religious belief. Prerequisite: 200-level philosophy course or consent of instructor.

PH 333 SEMINAR IN INTERDISCIPLINARY STUDIES: (3) A seminar with intensive analysis of selected issues, problems, thinkers, or areas which can involve interdisciplinary perspectives or which raise traditionally interdisciplinary questions. Consideration of the forms, fundamental ideas, and structures of intellectual and academic disciplines. May be offered in conjunction with other departments. Prerequisite: 200- or 300-level coursework or consent of instructor.

PH 399 INDEPENDENT STUDY: (1 to 6 credits) Directed written or reading projects to be arranged by the student and instructor. Intensive analysis of student work. Prerequisite: advanced work in philosophy or other disciplines.

PHYSICAL SCIENCE

The Physical Science Department is a multidisciplinary department which includes physics, chemistry, electronics, geology, and astronomy. The Department offers a Bachelor of Science degree in General Science with concentrations in general science education or chemistry. The general science education concentration is designed for students who plan to teach general science at the middle school, junior high school, or high school level. The chemistry concentration prepares students for graduate school or employment. Graduates have obtained positions as laboratory technicians, medical technologists, and teachers. Students who choose to teach chemistry must also elect professional secondary education courses.

The Department also offers a Bachelor of Science degree in Applied Chemistry. The primary emphasis of the major is the application of the principles of chemistry, physics, computer science, and electronics to chemical instrumentation. The curriculum includes a basic study of chemistry and physics along with the various aspects of electronics and computer technology required to produce hardware and software interfaces between instruments and computers.

The Department offers minor programs including the Computer Electronics Minor, the General Science Minor, and the Chemistry Minor.

Housed on the third floor of Wilson Hall, the department uses ten laboratories with the latest safety features. The chemistry labs are equipped with compressed air, vacuum, gas, steam, A.C. and controlled D.C. power, and fume hoods. Several labs are equipped with modern chemical instruments and microcomputers. The department possesses infrared, ultraviolet, flame and atomic absorption spectrophotometers, gas and liquid chromatographs, and a chemical laboratory robotics system among other instruments.

REQUIREMENTS FOR APPLIED CHEMISTRY MAJOR: 63 CREDITS

Students will be asked to take Calculus I and II as part of the All College General Education Core. General Chemistry I and Physics I may also be used to fulfill the All College General Education Core. The major will be effectively reduced to 53 credit hours.

REQUIRED COURSES:

PS 109 GENERAL CHEMISTRY I AND LAB (4)
PS 111 GENERAL CHEMISTRY II AND LAB (4)
PS 119 PHYSICS I AND LAB (4)
PS 121 PHYSICS II AND LAB (4)

MA 105 CALCULUS I (3)
MA 106 CALCULUS II (3)
MA 201 CALCULUS III (3)
MA 304 DIFFERENTIAL EQUATIONS (3)

PS 201 ORGANIC CHEMISTRY I AND LAB (4)
PS 203 ORGANIC CHEMISTRY II AND LAB (4)
PS 205 PHYSICAL CHEMISTRY I (3)
PS 207 PHYSICAL CHEMISTRY II AND LAB (4)
PS 209 ANALYTICAL CHEMISTRY AND LAB (4)
PS 211 INSTRUMENTAL ANALYSIS AND LAB (4)
PS 301 MICROPROCESSORS AND LAB (4)
PS 303 ANALOG AND DIGITAL ELECTRONICS AND LAB (4)
PS 306 INTRODUCTION TO INSTRUMENTATION SCIENCE AND LAB (4)

REQUIREMENTS FOR GENERAL SCIENCE CONCENTRATION: 49 CREDITS

This program is designed for, and only recommended to those students planning to teach general science at the 5-9 or 9-12 level. The student should choose, as electives, courses which meet the professional sequence recommended by the College for middle school or secondary school certification.

REQUIRED COURSES:

MA 103 & MA 104	College Algebra & Precalculus	(5-9)	
	or		
MA 105 & MA 106	Calculus I & II	(9-12)	(6)
PS 115 & PS 117	GENERAL PHYSICS I & II w/ LAB	(5-9)	
	or		
PS 119 & PS 121	PHYSICS I & II w/LAB	(9-12)	(8)
PS 109 & PS 111	GENERAL CHEMISTRY I & II w/LAB		(8)

PS 133 ASTRONOMY	(3)
PS 104 and PS 105 PHYSICAL GEOLOGY AND LAB	(4)
PS 106 HISTORICAL GEOLOGY	(3)
BI 104 BIOLOGY OF ORGANISMS	(4)
BI 102 ENVIRONMENTAL BIOLOGY	(4)
or	
BI 106 INHERITANCE & DEVELOPMENT	(4)

Elect a minimum of nine credits from the list below with a minimum of one course from each category listed:

Biology

BI 203 GENETICS I	(4)
BI 205 CELL BIOLOGY	(4)
BI 211 BOTANY OF HIGHER PLANTS	(4)
BI 221 VERTEBRATE PHYSIOLOGY	(4)
BI 223 MICROBIOLOGY	(4)
BI 237 HUMAN ANATOMY & PHYSIOLOGY	(4)

Chemistry

PS 201 ORGANIC CHEMISTRY I w/LAB	(4)
PS 203 ORGANIC CHEMISTRY II w/LAB	(4)
PS 205 PHYSICAL CHEMISTRY I	(3)
PS 209 ANALYTICAL CHEMISTRY w/LAB	(4)

If a student should use any of the listed courses for credit in the common core, the number of credit hours needed for the concentration would be reduced accordingly.

REQUIREMENTS FOR THE MINOR IN GENERAL SCIENCE 21-22 Credits

The General Science minor is designed to fulfill the new regulations requiring students seeking certification in Elementary Education to take a minor. The General Science Minor provides a broad background in science for those Elementary Education students wishing to minor in science. Students taking this minor will be prepared to teach science either in a self-contained classroom or as a science specialist in a departmentalized situation.

REQUIRED COURSES:

Physical Science or Introduction to Physics	(4)
Environmental Biology or Biology of Organisms	(4)
Introduction to Chemistry or General Chemistry I	(4)
Science for the Elementary School	(3)
Physical Geology Lecture and Lab	(4)
Astronomy	(3)

REQUIREMENTS FOR CHEMISTRY CONCENTRATION: 46 Credits

REQUIRED COURSES:

MA 105 CALCULUS I	(3) *
MA 106 CALCULUS II	(3)
PS 119 & PS 121 PHYSICS I & II w/LAB	(8)
PS 109 & PS 111 GENERAL CHEMISTRY I & II w/LAB	(8)
PS 201 & PS 203 ORGANIC CHEMISTRY I & II w/LAB	(8)
PS 209 ANALYTICAL CHEMISTRY w/LAB	(4)
PS 211 INSTRUMENTAL ANALYSIS w/LAB	(4)
PS 205 PHYSICAL CHEMISTRY	(3)
PS 213 BIOCHEMISTRY	(3)
PS 304 SEMINAR IN APPLIED CHEMISTRY	(1)
PS 229 THEORETICAL AND EXPERIMENTAL RESEARCH	(1)

* A student who does not feel sufficiently prepared to undertake calculus should take College Algebra and/or Precalculus.

If a student should use any of the above courses for credit in the General Core, the number of credit hours needed for the concentration would be reduced accordingly and additional courses would be taken to attain the number of total credits required for a degree.

It is expected that students, in consulation with a departmental advisor, will choose a portion of their electives from course offerings in chemistry, physics, biology, computer

science, and mathematics. Students wishing to obtain certification to teach chemistry should use electives to meet the professional sequence for secondary education recommended by the College.

REQUIREMENTS FOR THE CHEMISTRY MINOR: 18 Credits

In addition to the concentrations within the major, the Department offers a minor in chemistry. A chemistry minor must initially take General Chemistry I and II. An additional 10 credit hours is then required from the following courses:

PS 201/303	Organic Chemistry I & II	(8)
PS 205	Physical Chemistry	(3)
PS 209	Analytical Chemistry w/LAB	(4)
PS 213	Biochemistry	(3)
PS 211	Instrumental Analysis	(4)

COMPUTER ELECTRONICS MINOR: 18 Credits

The computer electronics minor would benefit a variety of students with interests in experimental sciences or technology. Students majoring in experimental psychology or biology may find an opportunity to develop skills in using computers and computer interfaces that will be very useful in graduate research. Media majors may develop skills and interests that provide entry to new technologies appearing in the arts. The minor may be particularly appropriate for computer science majors who wish to enter the CAM (computer assisted manufacturing) area or who are interested in scientific programming or software engineering or who wish to attend graduate school. The minor may eventually appeal to some students in education who plan on entering the attractive new computer education area. The minor requires the following courses:

PS 119	Physics I w/LAB	(4)
PS 120	Physics II w/LAB	(4)
PS 303	Analog & Digital Electronics w/LAB	(4)
PS 301	Microprocesssors & Microcomputers	(3)
PS 305	Introduction to Robotics	(3)

COURSES

PS 101 PHYSICAL SCIENCE (4) Includes the basic concepts of physics such as elementary study of mechanics, heat, sound, light, magnetism, and electricity, along with introductory topics in Earth-Space science and Chemistry. Three lectures and one double-period laboratory session per week.

PS 104 PHYSICAL GEOLOGY (3) A systematic examination of the rocks and minerals which compose the earth's crust and the processes of weathering and erosion which sculpture the crust. Structural, tectonic, and other long-term activities are investigated. 3 hours lecture per week. May be taken without laboratory.

PS 105 PHYSICAL GEOLOGY LABORATORY (1) introduces students to the practical aspects of mineral and rock identification, the interpretation of topographic maps, and the use of maps to study landforms. The course includes several field trips that involve additional time commitments (on weekends or beyond normal ending-time for the laboratory). Prerequisite: PS 104 or concurrent registration.

PS 106 HISTORICAL GEOLOGY (3) surveys earth history (with an emphasis on North America), as deduced from the rocks exposed at the earth's surface. Major topics to be covered include the interpretation of sedimentary rock sequences in terms of surface environments at different times in the past, the history of life on earth as revealed in the fossil record, and a synthesis of earth history in terms of plate tectonics.

PS 107 INTRODUCTION TO CHEMISTRY (4) is a one-semester course consisting of a broad look at fundamental concepts of modern chemistry. Topics studied will include atomic and molecular structure, physical and chemical changes, acid-base chemistry, organic chemistry, and biochemistry. These concepts will be applied to the examination of our energy picture, environmental, chemical technological processes, and other related matters. Three hours lecture, three hours laboratory per week.

PS 109 GENERAL CHEMISTRY I (4) is a broad look at the fundamental concepts of modern chemistry including the mole concept, stoichiometry, heat, the periodic table, atomic structure, bonding, gas phase chemistry, and organic chemistry. Three hours lecture, three hours laboratory per week.

PS 111 GENERAL CHEMISTRY II (4) is a continuation of General Chemistry I. The topics covered include solid, liquid and solution chemistry; chemical equilibrium; chemical kinetics and chemical reactions; acid-base theory; electrochemistry; nuclear chemistry; and selected topics. Three hours lecture, three hours laboratory per week. Prerequisite: PS 109.

PS 113 INTRODUCTION TO PHYSICS (4) is a largely non-mathematical introduction to physics. The course is designed to introduce students to the methodology and content of physics through the study of fundamental physical laws and applications of those laws to problems in the life sciences, geosciences and space sciences. Topics from both classical and modern physics will be included. Laboratory work is an integral part of the course and emphasizes a "discovery" approach. Three hours lecture, one hour discussion, and two hours of laboratory work per week.

PS 115 GENERAL PHYSICS I (4) is an algebra-based introduction to physics. Classical mechanics forms the core of the course. Topics to be covered include kinematics and dynamics of motion in one, two, and three-dimensions, work, energy, conservation laws, rotational motion, static equilibrium, and gravitation. Additional topics may include oscillations and waves, sound, fluid mechanics, and/or elementary thermodynamics. Three hours lecture, one hour discussion, and two hours of laboratory per week.

PS 117 GENERAL PHYSICS II (4) is a continuation of General Physics I (algebra-based physics). The major topic for the second semester is classical electromagnetism. Topics to be covered include Coulomb's Law, electric potentials, electric and magnetic fields, electromagnetic induction, simple AC and DC circuits, and an introduction to optics. Additional topics may include thermodynamics and/or an introduction to special relativity. Three hours lecture, one hour discussion, and two hours of laboratory work per week. Prerequisite: PS 115.

PS 119 PHYSICS I (4) is a calculus-based introduction to physics. Classical mechanics forms the core of the course. Topics to be covered include kinematics and dynamics of motion in one, two, and three-dimensions, work, energy, conservation laws, rotational motion, static equilibrium, and gravitation. The use of elementary calculus to solve problems involving trajectories, work, and one-dimensional potentials will be stressed. Three hours lecture, one hour discussion, and two hours of laboratory work per week. Prerequisite: MA 105 or concurrent registration.

PS 121 PHYSICS II (4) is a continuation of Physics I (calculus-based physics). The major topic for the second semester is classical electromagnetism. Topics to be covered include Coulomb's Law, Gauss' Law, electric potentials, electric and magnetic fields, electromagnetic induction, simple AC and DC circuits, Maxwell'equations and an introduction to optics. Mathematically, this course introduces students to applications of the integral calculus in solving simple two and three-dimensional potential problems. Three hours lecture, one hour discussion, and two hours of laboratory work per week. Prerequisites: PS 119 and MA 106 or concurrent registration.

PS 133 ASTRONOMY (3) is a broad introductory survey of astronomy. Topics to be covered include history of astronomy, the night sky, the Earth and Moon, the solar system, spacecraft exploration of the planets, stars and stellar evolution, supernovae, pulsars, black holes, the Milky Way, galaxies, quasars, and cosmology. Students will be expected to become familiar with the major constellations. Several optional observing sessions will be held on clear evenings.

PS 137 INTRODUCTION TO DIGITAL ELECTRONICS (3) This course is intended for students majoring in one of the sciences (Computer Science, Biology, Psychology, or General Science) or others who might expect a knowledge of basic electronics, digital logic and practical instrumentation to be useful. Basic electricity, electrical measurements, and electronic components including integrated circuits will be introduced. The course will emphasize applications using numerous practical or computer related activities.

PS 201 ORGANIC CHEMISTRY I (4) is a survey of general organic chemistry. Preview of chemical principles; the structure, nomenclature, properties and uses of aliphatic and aromatic compounds. Discussion includes the isolation and identification of organic compounds, nucleophilic displacement and elimination reactions and organometallic compounds. Three hours lecture, three hours laboratory per week. Prerequisite PS 111.

PS 203 ORGANIC CHEMISTRY II (4) is the continuation of Organic Chemistry I. The chemistry, properties and uses of alcohols, ethers, aldehydes, ketones, and organic acids are studied. Stereochemistry of organic structures are discussed. Carbohydrates, amino acids, proteins, and related biological processes are considered in emphasizing the life sciences and biochemical reactions. Three hours lecture, three hours laboratory per week. Prerequisite: PS 201.

PS 205 PHYSICAL CHEMISTRY I (3) investigates the structure and properties of matter. The course involves detailed study of the gas laws, kinetic-molecular theory, thermodynamics, thermochemistry, physical and chemical equilibria, and chemical bonding. Prerequisites: PS 111, MA 106.

PS 207 PHYSICAL CHEMISTRY II (4) is a continuation of Physical Chemistry I. Topics include chemical kinetics, liquid and crystal theory, phase equilibria, solution chemistry, electrochemistry, and selected topics. Three hours lecture, three hours laboratory per week. Prerequisite: PS 205.

PS 209 ANALYTICAL CHEMISTRY (4) consists of lectures, discussions, and laboratory work, covering the fundamentals of analysis. Study includes gravimetric analysis, volumetric analysis, and the statistical treatment of data. A main aspect of lecture will be the application of equilibrium to acid-base, precipitation, redox, and complex formation reactions. An important objective of the laboratory is the development of good laboratory technique. Three hours lecture, three hours laboratory per week. Prerequisite: PS 111.

PS 211 INSTRUMENTAL ANALYSIS (4) consists of lectures, discussions, and laboratory work covering the fundamentals of analysis. Emphasis will be on modern methods of instrumental analysis. Three hours lecture, three hours laboratory per week. Prerequisite: PS 209.

PS 213 BIOCHEMISTRY (3) The first portion of this course will study important biochemicals including water, amino acids, peptides, proteins, enzymes, carbohydrates, lipids, and nucleotides. The latter portion will examine the relationship of these compounds to bioenergetics, glycolysis, the tricarboxylic acid cycle, electron transport, oxidative phosphorylation, fatty acid oxidation and biosynthesis, carbohydrate biosynthesis, nitrogen and amino acid metabolism, protein synthesis, and photosynthesis. An effort will be made to correlate the various metabolic pathways with the cells and organelles of biological systems. Special topics may be covered if time should be available. 3 hour lecture. Corequisite: PS 201

PS 214 BIOCHEMISTRY LABORATORY (1) A three-hour laboratory session allowing students to develop laboratory technique in relationship to the study of biochemistry.

PS 229 THEORETICAL & EXPERIMENTAL RESEARCH (1-3)

PS 230 EARTH AND SPACE SCIENCES SEMINAR (1) offers students a chance to pursue topics in astronomy, geology, or related fields at a level beyond that of the introductory courses in those areas. One or more topics from a single discipline will serve as a focus for the course each semester. Topics will vary depending on the interests of the instructor and the students. Active student participation is required. May be repeated for credit with a different topic. Prerequisite: permission of the instructor.

PS 231 METHODS OF SCIENCE EDUCATION FOR THE MIDDLE SCHOOL/JR. HIGH SCHOOL (3) is designed to introduce the skills and techniques required for the successful teaching of General Science in the Middle School/Junior High School. The National Science Foundation programs and curricula based on these programs, with their emphasis on the inquiry approach, will be explored. Other topics will include evaluation techniques, laboratory safety, computer software, science societies, and journals. Prerequisites: Completion of a minimum of 20 hours of requirements for the General Science Major.

PS 241 METHODS OF PHYSICAL SCIENCE EDUCATION (3) is designed to introduce the skills and techniques required for the successful teaching of General Science and Chemistry in the secondary school. The National Science Foundation programs and curricula based on these programs, with their emphasis on the inquiry approach, will be explored. Other topics will include evaluation techniques, laboratory safety, computer software, science societies and journals. Prerequisites: Completion of a minimum of 20 hours of the requirements for the General Science Major.

PS 301 MICROPROCESSORS AND MICROCOMPUTERS (3) Deals with the architectures, instruction sets, and applications of microprocessors and microcomputers. The emphasis will be on computer hardware at the chip level. Interfacing to the bus and to special I/O chips will be introduced. Students will design and implement simple interfaces for data acquisition and control. The software content of the course will include the use of machine language monitors and assemblers, and linking machine language routines to high level languages such as BASIC and LOGO. Most applications will be to the 6502 and 8088 microprocessors and families, but other microprocessors and single chip microcomputers will be considered. Prerequisites: PS 137 and any programming course.

PS 303 ANALOG AND DIGITAL ELECTRONICS (4) is designed to acquaint the student with a wide variety of digital and analog circuit techniques using commonly available low cost integrated circuits. Analog elements such as op amps, CD amplifiers, timers, multipliers and phase locked loops will be used to demonstrate analog computing techniques such as

integration, summing, and differentiation, and other analog methods such as filtering, modulation, and demodulation. Transducers such as light sensitive resistors, thermisters etc. will be used. Digital techniques for timing, counting, and arithmetic will be studied using TTL and CMOS integrated circuits. Computer interfacing will be introduced. Combined lecture-lab will be 5 hours a week. Prerequisite: PS 121 or PS 132.

PS 304 SEMINAR IN APPLIED CHEMISTRY (1) A series of lectures by invited chemists active in non-academic laboratories (e.g., industrial, government, hospital). Sponsored jointly with the Cooperating Colleges of Greater Springfield (CCGS). The course will be offered only on a pass/fail basis. Prerequisite: PS 111.

PS 305 INTRODUCTION TO ROBOTICS (3) introduces some of the basic concepts and applications of robotics using educational and commercial laboratory automation robots. Emphasizes robot geometry, the robot as a computer peripheral, robot languages, computer vision, robot applications, and robots in society. Students will be introduced to some of the current robotics literature as well as experience some practical hands-on laboratory work. Prerequisites: PS 317, MA 106, and any computer programming course.

PS 306 INTRODUCTION TO INSTRUMENTATION SCIENCE (4) The course will survey and acquaint the student with the general principles of instrument design and operation. Topics to be studied include signal theory, information-handling processes, transformation processes, instruments as systems, models of instruments, instrument design and errors. Applications will be to chemical instrumentation. Each student will carry out a design of a project involving an interface (software and hardware) between one of the available instruments (infrared spectrometer, ultra-violet visible spectrometer, polarograph, gas and high pressure liquid chromatographs, nuclear magnetic resonance spectrometer, atomic absorption spectrometer) and a computer or microcomputer. Students will be required to read and report on current instrumentation presented in recent literature or at instrumentation trade shows. Combined lecture-lab will be 5 hours a week. Prerequisites: PS 211 and PS 301.

PS 399 INDEPENDENT STUDY (3-6)

POLITICAL SCIENCE

The Department of Political Science offers four concentrations: Law, Public Administration and American Politics, International Studies and Theory, and Interdisciplinary Law and Legal Studies. The internship program, a key element in the department's offerings, features 3 to 6 credit placements locally and in Boston and a 15-credit program in Washington, D.C. Each year, the International Relations Club participates in a model United Nations in New York City and often in other models as well. The department also sponsors a local chapter of the national honor society in Political Science, Phi Sigma Alpha.

Political scientists learn to think critically and analytically and to apply a broad understanding of the nature of politics to the important questions of our time. A major in Political Science alone or in combination with another major not only prepares you for careers in law or government, but also provides you with skills necessary in a wide range of other professional and managerial positions.

REQUIREMENTS BACHELOR OF ARTS IN POLITICAL SCIENCE: 36 CREDITS

The Political Science Major has four regular tracks and one interdisciplinary track. The program permits the student to study with or without an internship in his/her choice of Public Administration and American politics, International Studies and Theory, or Interdisciplinary Law and Legal Studies. Internships, through not mandatory, are usually available in all tracks.

1. Nine credits of required courses including American National Government, Political Analysis, and one other course selected from the following six courses:

PL 103 State and Local Government (3)
PL 210 Comparative European Government (3)
PL 205 Urban Politics (3)
PL 308 Constitutional Law (3)

2. Twelve credits in one of four tracks in political science or 18 hours in the Interdisciplinary Law and Legal Studies track.

3. Fifteen credits of additional political science course work.

MAJOR FIELDS OF CONCENTRATION

Note: Special Topics and Internships may be offered in any of the following four tracks:

Track 1: International Studies and Theory
PL 206 Political Analysis (3)
PL 209 International Relations (3)
PL 210 Comparative European Government (3)
PL 301 Political Theory I (3)
PL 302 Political Theory II (3)
PL 305 American Foreign Policy (3)
PL 314 Communist Systems (3)
PL 315 Comparative Judicial Systems (3)
PL 317 Comparative Ideological Systems (3)
PL 321 Issues In U.S. Politics (3)
PL 324 Third World Politics (3)

Track 2: Pre-Law
PL 207 Administrative Law (3)
PL 304 American Political Ism's (3)
PL 308 Constitutional Law (3)
PL 309 Civil Liberties I (3)
PL 315 Comparative Judicial Systems (3)
PL 316 Adjudication of Social Issues (3)
PL 323 Special Topics in Law (3)

Track 3: Public Administration and American Politics
PL 103 State & Local Government (3)
PL 204 Introduction to Public Administration (3)
PL 205 Urban Politics (3)
PL 207 Administrative Law (3)
PL 304 American Political Ism's (3)
PL 305 American Foreign Policy (3)
PL 306 The American Political Process (3)
PL 307 Executive & Legislative Politics (3)
PL 308 Constitution Law (3)

PL 309 Civil Liberties I (3)
PL 315 Comparative Judicial Systems (3)
PL 318 Public Management Skills (3)
PL 319 Bureaucratic Politics (3)
PL 320 Politics of Budget-Making (3)
PL 321 Issues in U.S. Politics (3)

Track 4: Interdisciplinary Law and Legal Studies

Phase I
PL 207 Administrative Law (3) (Required)
PL 308 Constitutional Law (3) (Required)
PL 309 Civil Liberties I (3) (Required)
PL 316 Adjudication of Social Systems (3) (Required)

Phase II
PH 103 Symbolic Logic (3)
PL 206 Political Analysis (3)
CJ 204 Principles Of Investigation (3)
CJ 305 Principles of Evidence and Proof (3)

Phase III
BI 223 Environmental Legislation (3)
MG 241 Business Law (3)
MG 301 Labor Relations (3)
CJ 203 Criminal Law (3)
CJ 316 Civil Liabilities for Criminal Jusitice Professionals (3)
MC 307 Broadcast Law (3)
PH 305 Philosophy of Law and Legal Systems (3)
PL 315 Comparative Judicial Systems (3)

About Track 4
The four courses in the first phase are required. The student may take either Symbolic Logic, Political Analysis or Evidence/Investigations in the second phase and one of the different Law specialty courses offered by other departments of the College for the third phase.

If students selects PL 206 Political Analysis they will be permitted to take an additional two courses: either one of the two in the second phase (Symbolic Logic or Evidence) and a specialty Law course from the third phase; or two specialty courses from the third phase.

Students may decide to select all three courses from the second phase (Symbolic Logic, Research and Methodology, and Evidence) and omit the third phase.

The 18-credit concentration including the non-political-science courses will count toward the 36-credit major in Political Science.

MINOR: 18 CREDITS
Students in such fields as economics, business administration, history, psychology or criminal justice often find the option of a minor in political science particularly attractive. Students who wish to minor in political science are required to take 18 credits of courses within the Department. An internship may make up part of the 18 credits if the student qualifies for such a program and receives such an assignment.

URBAN STUDIES CONCENTRATION

The student who wishes to be a political science major (36 credits) with a minor in Urban Studies (18 credits) may take any track either with or without an internship. The student should choose his/her required additional 18 credits in other departments with the assistance of his/her advisor. These credits may be selected in such areas as: history, mathematics, geography and regional planning, education, economics, sociology, business administration and psychology.

COURSES

PL 101 AMERICAN NATIONAL GOVERNMENT (3) Fundamental course dealing with the constitution, congress, president, courts, and political party systems of the American National government.

PL 103 STATE AND LOCAL GOVERNMENT (3) Fundamental course dealing with the powers, organization, functions and intergovernmental relations of the state, country, municipality and other local governments.

PL 204 INTRODUCTION TO PUBLIC ADMINISTRATION (3) The relationship of the administrative branch of government to other branches in the making and implementation of public policy, theories of government organization for efficient administration, problems of budgeting, personnel, merit systems, types of agency organization, popular control over the bureaucracy.

PL 205 URBAN POLITICS (3) Exemplifies the areas of "urban problems" in the context of leading political science theories, and in turn examines these writings in light of contemporary developments in the cities.

PL 206 POLITICAL ANALYSIS (3) Quantitative and Qualitative approach to understanding how theory is constructed. Political thought and action and its relation to normative and empirical studies found in the following disciplines: Philosophy, Sociology, Economics, and Science. Emphasis on how political theory and analysis deals critically with social change through the mediation of structural functional and conflict models of change.

PL 207 ADMINISTRATIVE LAW (3) Law concerning the powers and procedures of administrative agencies and the part they plan in setting and rejecting governmental policy. Special attention is put on the courts' role in mediating agency actions and their constitutionality within the branches of the federal government.

PL 209 INTERNATIONAL RELATIONS (3) An introduction to the nation-state system and conceptions of national interest in modern world politics. The forms and distribution of power by which states seek to implement national interest. The making of foreign policy and methods of adjusting international conflict. Emphasis on current international problems.

PL 210 COMPARATIVE EUROPEAN GOVERNMENT (3) The institutional approach will be employed to the study of the governments of England, France, Italy, Germany, and the Soviet Union. The institutional approach considers the organizations of governments, their constitutional basis, their sources of legitimacy, and their methods of operation. This approach seeks to understand the workings of governments by an analysis of these components.

PL 211 COMPARATIVE FOREIGN POLICY (3) The nation-state and its power relationships with other states and international organizations, regional and global. A theoretical study of the cultural, ideological, economic, institutional, and personality influences on the foreign policy of particular countries. The country studied will change from semester to semester. Students may therefore enroll for the course more than once. Prerequisite: PL 101.

PL 301-302 POLITICAL THEORY, I, II (3 each) Selected issues in the history of political thought wit emphasis on their pertinence to ancient and recent political, economic, and social problems.

PL 304 AMERICAN POLITICAL ISM's (3) Analysis of the origin and function of theory and ideology in the American political and institutional experience with regard to such categories as: Conservatism, Liberalism, Socialism, Elitism, and Managerialism (political economy). Special emphasis will be placed on the contemporary impact of such ideological labels.

PL 305 AMERICAN FOREIGN POLICY (3) Constitutional, political, ideological, and administrative considerations which influence the formulation and execution of American foreign policy. Special emphasis on current issues.

PL 306 THE AMERICAN POLITICAL PROCESS (3) A study of how the political ideas, values, and goals of the America people are expressed through the machinery of American politics; parties, elections, interest groups and social movements.

PL 307 EXECUTIVE AND LEGISLATIVE POLITICS (3) The origins, development, and functions of the executive and legislative branches of American Government. The study of the impact of social structure and the economic system on these institutions. Analysis and discussion of their power relationships and their place in American politics.

PL 308 CONSTITUTIONAL LAW (3) The Federal system under the Constitution of the United States, judicial review in constitutional cases, state and local rights and responsibilities.

PL 309 CIVIL LIBERTIES (3) Selected cases dealing with constitutionally protected rights of speech, press, and assembly, as well as with court created rights.

PL 314 COMMUNIST SYSTEMS (3) An innovative course to relate general comparative politics theory to the study of Communist political systems; their conceptualization from totalitarian, structural-functional, and Marxist-Leninist perspectives; their similarity and diversity across geographic, cultural, and developmental lines.

PL 315 COMPARATIVE JUDICIAL SYSTEMS (3) A study of selected countries' judicial systems dealing with each system's origins, development, and the kinds of cases which the system is called upon to adjudicate.

PL 316 ADJUDICATION OF SOCIAL ISSUES (3) A study of the extensive changes in the American social, economic, and political structure brought about within the framework of the judicial process.

PL 317 COMPARATIVE IDEOLOGICAL SYSTEMS (3) An examination of the major theoretical foundations of communism, fascism, democracy and socialism. A study of ideological doctrines and institutional patterns and their consequences and prospects for the future.

PL 318 PUBLIC MANAGEMENT SKILLS (3) Emphasizes those areas most important to administration, including in-depth work in public budgeting and finance skills; details of public personnel activities and problems (recruiting, hiring, training, promotions, etc.); various facets of public relations, ranging from inter-organization communication to dealing with media; leadership, decision-making and supervision. Draws from contemporary examples.

PL 319 BUREAUCRATIC POLITICS (3) Includes various theories of organization, but emphasizes the organization's place in the U.S. political system; that is, the partisan political and the interest group politics which shape the public programs at all levels of government.

PL 320 POLITICS OF BUDGET-MAKING (3) Deals with federal, state, and local budgets, how they are made, who influences the decisions, and the implications of those decisions.

PL 321 ISSUES IN U.S. POLITICS (3) Analysis of conflict and decision-making in specific policy areas. These will change from semester to semester and will include, among others, energy, employment, defense, economic policy, education, and race and ethnicity. Students may therefore enroll for the course more than once. Prerequisite: PL 101 or PL 103 or equivalent.

PL 323 SELECTED TOPICS IN POLITICAL SCIENCE (3) A study of basic political and intellectual forces shaping contemporary world politics. Information concerning past events, issues, movements, and personalities are subjected to reinterpretation in the light of recent scholarship. Prerequisite: PL 101.

PL 324 THIRD WORLD POLITICS (3) Comparative analysis designed for the student interested in general problems of politics and development in the third world; concepts are drawn from several analytical approaches and are applied to case studies of African, Asian, and South American countries. Prerequisite: six credits in social science or equivalent.

PL 397 POLITICAL SCIENCE INTERNSHIP (3 or 6) Provides experience in a local, regional or state governmental office. Daily journal and semester paper required.

PL 398 WASHINGTON INTERNSHIP (15) A semester in the nation's capitol serving in a public service office at a junior entrance level. One evening course included. Daily journal and semester paper required.

PL 399 INDEPENDENT STUDY

PSYCHOLOGY

The Psychology major combines a theoretical introduction to the major fields of psychology as well as a practical curriculum designed to prepare students for further graduate study or for a career in psychology-related fields. In addition, it is not unusual to find students with a strong psychology background employed in business and personnel areas. Many students pursue double majors with Criminal Justice, Economics/Business Management, and Computer Science.

The Department houses laboratories and equipment for experimental work in both animal and human learning. A practicum course is also regularly offered in conjunction with area human service agencies, schools, and businesses. The Center for Psychological Services, staffed by faculty from the Department, provides free, confidential counseling to members of the college community. There is also a peer counseling group for which selected students may earn academic credit.

REQUIREMENTS FOR PSYCHOLOGY MAJORS

Psychology majors must take at least 36 hours within the Department. Required courses include:

PY 101 Introduction to Psychology (3): prerequisite to all other psychology courses
PY 105 Research Methods (3): prerequisite for all "natural science" psychology courses expected for all other psychology courses. This course should be taken in the semester following Introduction to Psychology

2 courses from each of the groups below: 18 credits

Natural Science
PY 306 Basic Principles of Learning (3)
PY 308 Statistics for Psychologists (3)
PY 309 Experimental Design (3)
PY 312 Physiological Psychology (3)
PY 313 Comparative Psychology (3)
PY 341 Cognitive Psychology (3)
PY 359 Sensation and Perception (3)

Social Science
PY 201 Theories of Personality (3)
PY 202 Child Psychology (3)
PY 203 Adolescent Psychology (3)
PY 303 Abnormal Psychology (3)
PY 304 Social Psychology (3)
PY 336 Psychology of the Family (3)

Applied
PY 200 Industrial Psychology (3)
PY 206 Educational Psychology (3)
PY 317 Behavior Modification (3)
PY 318 Psychology of Interpersonal Relations and Communications (3)
PY 322 Theories of Counseling (3)
PY 323 Counseling Theory and Practice (3)

Electives in Psychology 12 credits - any psychology courses

Total credits in Psychology Major 36

REQUIREMENTS FOR A MINOR IN PSYCHOLOGY

A total of 18 credits in psychology department offerings will qualify a student for a minor in psychology.

COURSES

PY 101 INTRODUCTION TO PSYCHOLOGY (3) Overview of the basic theories and facts of human behavior and mental life. Topics include the scientific method, the physiological bases of behavior, sensation and perception, learning and memory, development, personality, social psychology, and abnormal behavior. Psychological knowledge is related to daily problems and everyday life. This course is a prerequisite to all other psychology courses.

PY 105 RESEARCH METHODS IN PSYCHOLOGY (3) Introduction to the scientific method as utilized in psychology. Students are given laboratory experience at carrying out simple

research. Lectures cover the concepts of an hypothesis, an experiment, control procedures, law, and theory. The course focuses on research methods, experimental techniques, and mention of the basic statistical concepts as they are utilized in research on developmental, social, clinical, and personality psychology; the psychology of perception, cognition, and learning. This course is required of all psychology majors. Prerequisite: PY 101 (This course should be taken the semester after completion of Introduction to Psychology).

PY 200 INDUSTRIAL AND ORGANIZATION PSYCHOLOGY (3) Concerns the application of psychological principles to the problems of people operating within business or industry. Includes such topics as the nature of organizations, effective leadership styles, communication skills, group dynamics, and the role of leisure time. Prerequisite: PY 101.

PY 201 THEORIES OF PERSONALITY (3) The major theories of personality, including those of Freud, Jung, Sullivan, Allport, and Rogers, and the evidence used to support them. Comparisons and contrasts of these theories are made and implications drawn will be discussed and applied to counseling, psychotherapy, and education. Prerequisite: PY 101.

PY 202 CHILD PSYCHOLOGY (3) The systematic study of the organismic and psychological changes in the child from birth up to adolescence, and of the importance of maturation, growth, and social learning in effecting these changes. Attention is focused on factors in personality, emotional, and cognitive development. Several lectures cover psychological theories of child development as based on available research data. Prerequisite: PY 101.

PY 203 ADOLESCENT PSYCHOLOGY (3) Course concerns the adolescent period of life. Lectures cover the various aspects of development: physical, intellectual, social, emotional, and sexual. Several lectures involve the interpersonal aspects of the life of adolescents, including family, peer, and school relationships, vocational choice, and the self-concept. Also covered are various psychological theories of adolescent development as based on available research data. Prerequisite: PY 101.

PY 204 SELF-CONTROL AND STRESS MANAGEMENT (3) The concept of self-control will be examined from various psychological perspectives (e.g., behavioral, psychoanalytic, and humanistic), and a technology of self-control procedures will be introduced which have application to a wide range of clinical problems. The determinants of stress and its manifestations physiological, behavioral, and cognitive will also be examined together with procedures for stress management, including relaxation techniques, meditation, biofeedback, and cognitive-behavioral strategies. Prerequisite: PY 101.

PY 205 CAREER PLANNING AND DEVELOPMENT (3) Designed to familiarize students with the major theories of career choice, to enable them to learn a self-assessment process in relation to career opportunities, and to develop flexible strategies for achieving and managing a satisfactory career. The course will also include a discussion of various problems associated with different career opportunities such as technological and social change, value conflicts, dual-career couples and adult developmental needs. Prerequisite: PY 101.

PY 206 EDUCATIONAL PSYCHOLOGY (3) The study of the psychological concepts in educational practices, including the nature and sources of individual differences and readiness, learning theories, motivations, emotions, and the evaluation of learning techniques. Prerequisite: PY 101.

PY 303 ABNORMAL PSYCHOLOGY (3) The etiology, development, and therapy of mental disorders. Stress will be on the psychodynamics of pathological behavior. Consideration will be given to various forms of unusual behavior ranging from anxiety states to psychosis. Analysis of pathological behavior will be based on current theories of maturation, emotion, and personality organization. Prerequisite: PY 101, PY 201.

PY 304 SOCIAL PSYCHOLOGY (3) The individual's behavior and cognition in the social setting. Social psychology includes the processes of interaction, enculturation, prejudice, attitudes, and a psychological analysis of social institutions such as church, family, and school. Prerequisite: PY 101.

PY 306 BASIC PRINCIPLES OF LEARNING (3) An introduction to the terminology, concepts, and methods in the study of learning. An examination of principles in terms of early and contemporary inquiries and experiments. The focus is on classical and instrumental conditioning, generalization, and discrimination processes. Designed for students who major or concentrate in psychology. Prerequisite: PY 101, PY 105.

PY 308 STATISTICS FOR PSYCHOLOGISTS (3) The application of statistical methods to current research problems in psychology. The selection of procedures appropriate to problems, performance of the procedures, interpretation of outcomes, data tabulation and reduction, measures of central tendency and variability, correlation and prediction, tests of

significance, t-test, chi square and analysis of variance. Prerequisite: PY 101, PY 105.

PY 309 EXPERIMENTAL DESIGN (4) A full year course in the methods and theory of experimental psychology, stressing selected topics from the areas of sensation, perception, and learning. A thorough grounding in laboratory methods in focus of this course. Each student will be required to design, conduct, and interpret experiments in the major areas under consideration. Two lectures and two laboratory periods per week. Psychology majors only. Prerequisite: PY 101, PY 105, PY 308.

PY 312 PHYSIOLOGICAL PSYCHOLOGY (3) The focus is on the study of the physiological correlates of behavior. Special attention will be given to the physiological and neural aspects of emotions, motivation, and learning. Psychophysiological factors of health, disease, psychosomatics, and chemotherapy will be included. Prerequisite: PY 101, PY 105.

PY 313 COMPARATIVE PSYCHOLOGY (3) A study of the similarities and differences in the behavior of animals, ranging from the unicellular to non-human primates. The course will stress comparative learning, but aspects of such topics as instinctive behavior, psychophysiology, and social behavior will also be discussed. Psychology majors only. Prerequisite: PY 101, PY 105.

PY 314 HISTORY AND SYSTEMS OF PSYCHOLOGY (3) Aim is to familiarize the student with the antecedents of modern psychology, the rise of experimental psychology as a science, the British, German, and American schools of psychology, and contemporary pyschological systems. Several lectures cover the philosophical foundations of experimental psychology, and the philosophy of theory construction. Prerequisite: PY 101, PY 201; (PY 306 strongly recommended).

PY 316 PSYCHOLOGY OF HUMAN SEXUALITY (3) A study of the differences between the psychological development of men and women. Stresses the phenomenon of role typing at an early age of development. Re-evaluation of Freud's theories on the psychological development of women. Course reviews new research findings on psycho-sexual development and related child-rearing practices. Not open to freshmen. Prerequisite: PY 101.

PY 317 BEHAVIOR MODIFICATION (3) Presentation and intensive discussion of classroom teaching approaches based on respondent and operant conditioning paradigms. Detailed presentation of major principles underlying each approach and application of these principles to classroom learning situations at both elementary and secondary grade levels. Consideration of such topics as token economy and the classroom, modeling, desensitization, effects of punishment of classroom behaviors, approaches to behavioral problems of the emotionally disturbed and/or mentally retarded. Prerequisite: PY 101, PY 201, PY 303.

PY 318 PSYCHOLOGY OF INTERPERSONAL RELATIONS AND COMMUNICATIONS (3) Practical experience in interpersonal communication with use of videotape and social psychology laboratory. Review of research on human communication from the viewpoint of transactional analysis, kinesics, the small-group approaches of Rogers, Ellis, Perls, and Synanon. Limited in size and to junior and senior psychology majors; others admitted with special permission of instructor. Prerequisite: PY 101.

PY 322 THEORIES OF COUNSELING (3) A presentation of the philosophies, methods, techniques and research associated with five or six major contemporary counseling theories such as psychoanalytic, client-centered, rational emotive, and gestalt. Prerequisites: PY 101 and PY 201.

PY 323 COUNSELING THEORY AND PRACTICE (3) Designed to help counselors to develop an understanding of the issues involved in helping relationships dealing with persons having educational, vocational, interpersonal and intrapersonal problems. Techniques and abilities to apply basic counseling skills will be stressed. The aim of the course is to develop an advanced understanding of major counseling theories. Elective for juniors and seniors. Prerequisite: PY 101, PY 322.

PY 332 PEER SEX COUNSELING PROGRAM (2 semesters 1.5 credits each) Aims to familiarize students with information basic to human sexual behavior and sexual problems so that these students can function as a resource individuals and counselors to their peers. Training is given in areas such as physiology of sex, problem pregnancies, community resources and counseling techniques. Prerequisite: Admission through screening interviews and evaluations.

PY 333 PRACTICUM IN PSYCHOLOGY (6) Students are placed in agencies which provide various psychological services to the community. The primary goal of the placement is to provide an opportunity for the student to become involved in a meaningful manner with the services provided by the agency. It is hoped that the student can make a contribution to the service. The student is responsible, under the joint direction of an agency representative

and a Department of Psychology supervisor, for the formulation of a detailed outline of activities, time commitment, and responsibilities. The student will also prepare a term paper and a final evaluation related to the activities in which she or he is involved. The agency is expected to provide general supervision and make a final evaluation of the student's performance. The Department representative will make periodic evaluations of the student's performance and will cooperate fully with the agency supervisor. Prerequisites: PY 101, PY 322, PY 323.

PY 335 SENIOR SEMINAR (3) A limited enrollment course designed according to current student and faculty interests and focused on advanced study of current research and theory in a particular area of psychology. Prerequisite: PY 101 and senior status.

PY 336 PSYCHOLOGY OF THE FAMILY (3) A presentation of theories of how family interaction and patterns of response influence personality and behavior. An exploration of the characteristics of "healthy" and "unhealthy" families and the types of individuals they produce. A review of family therapy techniques as a means of treating the "identified patient." Limited to juniors and seniors. Prerequisite: PY 101.

PY 341 COGNITIVE PSYCHOLOGY (3) The psychology of sensation, perception, psycholinguistics, cognition, and information processing. Topics include computer models of thought and language, artificial intelligence, and altered states of consciousness. Lectures stress in-depth reviews of the experimental evidence which bears on theories of perception and language. Prerequisite: PY 101.

PY 343 PRO-SEMINAR I: CLINICAL COMMUNITY COUNSELING (6) Part of a comprehensive program open to students beginning their senior year who are interested in a career in counseling mentally ill children, adolescents and adults; this course combines an overview of the public mental health delivery system, child and adult psychopathology, marital and family psychopathology, diagnostics, psychopharmacology, and clinical assessment, evaluation and diagnostic approaches. Students will observe in a prescribed number of area mental health agencies. The site visitations will approximate a total of 30 hours. Prerequisite: PY 101, 105, 301, 303, 312, 353, 323, or permission of the instructor.

PY 344 PRO-SEMINAR II: CLINICAL COMMUNITY COUNSELING (3) Open to those students who have successfully completed Pro-Seminar I in Clinical Community Counseling, this course trains students in the methods and approaches for counseling emotionally ill children, adolescents and adults through extensive use of case methods. Included are strategies for engaging the client, providing supports, developing treatment plans, providing therapy, initiating out-reach and aftercare, performing crisis intervention, and assessing and revising the course of treatment. All students are required to take the internship in Clinical Community Counseling simultaneously with this course. Prerequisite: PY 343 or permission of instructor.

PY 345 INTERNSHIP: CLINICAL COMMUNITY COUNSELING (6) This internship involves placement of students in a single mental health agency for ten hours weekly during the semester. Students will work with the staff and clients of the agency and will receive weekly supervision in developing their counseling skills. Prerequisite: PY 343 and concurrent PY 344.

PY 350 PSYCHOLOGY OF DEATH AND DYING (3) An inquiry into the current psychological theories, concepts and practices relevant to death, dying and bereavement. The course explores the ways in which individuals and society deal with death and will give students the opportunity to examine their own personal attitudes and philosophy toward death and dying. Prerequisite: PY 101.

PY 356 SPECIAL TOPICS IN PSYCHOLOGY (3) An in-depth study of a limited and/or specialized area within one field of psychology. The exact title will vary according to the area of specialization of the instructor and interest of the students. Students may receive no more than 6 sh credit for this course number. Prerequisite: at least 9 sh (including PY 101) for psychology majors; PY 101 and permission of the instructor for non majors.

PY 357 ADULT DEVELOPMENT AND AGING (3) A study of human development through the early, middle, and later adult years. The course will focus on the maturational and environmental determinants of changes in sensation and perception, learning and memory, intelligence, cognition, and personality. Prerequisite: PY 101.

PY 358 PERSONNEL PSYCHOLOGY (3) The utilization of human resources in organizational settings with primary emphasis on identification and implementation of conditions that lead to effective job performance. Topics include recruitment and selection techniques, job analysis, personnel training, and performance appraisal. Prerequisite: PY 101.

PY 359 SENSATION AND PERCEPTION (3) Introduction to the laboratory study of perceptual phenomena. Students use different instrumentation such as the tachistoscope and dichotic

listening equipment and apply various methodologies in a series of experiments during the first part of the course, comparing several theoretical approaches. The second part of the course is given to laboratory demonstrations and the development of an individual project. Prerequisites: PY 101, PY 105, and permission of instructor.

PY 360 LEARNING LABORATORY (3) Provides students with laboratory experience in animal learning. Initially all students will train animals using basic procedures in behavioral control including shaping, response acquisition and simple discrimination. Students will then pursue individual projects examining response chaining, performance on simple or complex schedules of reinforcement, choice behavior, and other areas of learning. Prerequisites: PY 101, PY 105, and PY 306.

PY 361 PSYCHOLOGY OF RACISM (3) Provides students with an understanding of the psychological causes and emotional reality of racism as it affects everyday life. Through the use of lectures, readings, simulation exercises, group research projects, and extensive class discussion, the student explores the psychological impact of racism on both the oppressor and the oppressed. Prerequisite: PY 101.

PY 362 ALCOHOLISM: CAUSES AND TREATMENT (3) The objectives of this course are to explain and interpret the dynamics, research. and most effective treatment modalities for alcohoism. Included are the physiological-causes of alcoholism, common psychological-denominators, defenses, the progression and the recovery-relapse of the alcoholic. The alcoholic family as a unit to be treated is considered also. Prerequisite: PY 101 or permission of instructor.

PY 381 EXPERIMENTAL SOCIAL PSYCHOLOGY (3) Provides skills in field and laboratory research methodology. A few topics in social psychology, such as interpersonal attraction, attitude change, social cognition and impression management are discussed in detail. Following an in-depth analysis of a specific topic, students conduct either field or laboratory experiments. Students are closely supervised and are responsible for conducting and scheduling experiments; collecting, coding and analyzing data; and submitting a final written report in APA format for each experiment. Prerequisites: PY 105, PY 304, or permission of instructor.

PY 399 INDEPENDENT STUDY PSYCHOLOGY (1-6) Credit for independent study is granted for special academic work done under the supervision of a faculty member of the Psychology Department. This work may involve a) library research and subsequent preparation of a scholarly paper, b) design and completion of an experimental project or field study, c) advanced study and application of concepts in a particular area of psychology beyond that covered in typical course work. At the end of the project, a final written report should be submitted to the faculty supervisor, with a copy to the departmental advisor and a copy to the chairman of the department. Prerequisite: PY 101; approval by student's advisor, department chairman and Academic Dean.

SOCIOLOGY AND SOCIAL SCIENCE

The student majoring in Social Science takes courses from several social science areas: Economics, Geography, History, Political Science, Psychology, and Sociology. Majors may select either of the following two concentrations: the general Social Science concentration or the Social Work concentration. At present, the department does not offer a Sociology or Social Work major. The department offers two minors: one in sociology and one in social work. The department also provides for practical experience through placement in community agencies.

As a liberal arts degree candidate, the Social Science student receives a broad education providing for vocational flexibility in the worlds of both business and government. Private and public agencies offer employment possibilities in research and social service work. The student seeking a progressive, life-long career path either as a social scientist or as a social service worker should, however, seriously consider professional study beyond the bachelor's level.

REQUIREMENTS FOR SOCIAL SCIENCE MAJORS

FOUNDATION COURSES

For majors concentrating in Social Science, one foundation course (i.e., a level-100 course, usually) should be taken in each of the following fields: Sociology, Psychology, Geography, Economics, and Political Science. Majors concentrating in Social Work must take Principles of Sociology and a foundation course in one other social science discipline.

CONCENTRATIONS

For the General Social Science concentration, nine credits of post-introductory work (level-200 course or higher) should be selected in one of the following fields and six in each of two others: History, Sociology, Psychology, Geography, Economics, and Political Science. Six additional credits are required in one of the three fields selected above. Finally, a three credit Senior Thesis or Social Science Internship is required for a total of forty-five credits in the concentration.

Students who select the concentration in Social Work must take Introduction to Social Work, Introduction to Social Welfare, Interventive Methods in Social Work, Human Services: Planning and Organization, and a six credit Social Work Practicum. In addition, twelve credits are required in post-introductory Sociology courses, for a total of thirty-six credits in the concentration.

[Note: Social Work courses must be taken in an appropriate sequence: Introduction to Social Work and Introduction to Social Welfare are both required before taking either Interventive Methods or Human Services Planning and Organization. All four of these courses must be completed before the Social Work Practicum.]

MINOR REQUIREMENTS IN SOCIOLOGY AND SOCIAL WORK

The department offers two minors and provides a variety of service courses to augment other academic disciplines. The department also provides for practical experience through placement in community agencies.

The requirements for a minor are as follows:

1. Minor in Sociology: 18 hours total

    * SO 101 Principles of Sociology (3)
    * Two Sociology courses (either 200 or 300 level) (6)
    * Three Sociology courses (at 300 level) (9)

2. Minor in Social Work: 18 hours total

    * SO 104 Introduction to Social Work (3)
    * SO 105 Introduction to Social Welfare (3)
    * SO 322 Interventive Methods in Social Work (3)
    * SO 324 Human Service: Planning and Organization (3)
    * SO 351 Social Work Practicum (6)

COURSES

SO 101 PRINCIPLES OF SOCIOLOGY (3) An overall study of the concepts and principles of group behavior analysis of the components of culture and the structure of society; social organization and differentiation.

SO 104 INTRODUCTION TO SOCIAL WORK (3) Pre-professional course designed to provide view of historical background, basic principles and concepts, current trends, and careers in Social Work.

SO 105 INTRODUCTION TO SOCIAL WELFARE (3) A study of Social Welfare as an institution the development of the Social Welfare profession through the ages, comparative institutional analysis, normative and organizational structure.

SO 200 CULTURAL ANTHROPOLOGY (3) An overview of cultural anthropology as a discipline and to the concepts and techniques essential for understanding different cultures, both contemporary and past. Includes analysis of universal aspects of human experience, including the family, economic, political, religious, artistic, and linguistic systems, examined in cross-cultural perspective. A brief examination of hunters and gatherers, tribal and peasant peoples, among others and an introduction to the dynamics of cultural contact, cultural evolution, and change.

SO 201 THE FAMILY (3) The family as a social institution, affected by and affecting other institutions. Some material of the family in non-industrial societies will be included, but the main focus will be on persisting patterns and on changes in pre-marital, marital, and family relationships in the United States.

SO 202 RACE AND ETHNIC RELATIONS (3) A study of the phenomena which arise when different biological and cultural groups interact, and of theories and methods calculated to reduce antipathy and discrimination against minority groups, with an emphasis on American relations.

SO 204 INTRODUCTION TO RESEARCH METHODS IN SOCIOLOGY (3) The development of social research; the nature of sociological inquiry; basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite: SO 101.

SO 300 SENIOR THESIS/INTERNSHIP (3-6) The course provides an opportunity for independent study which may take a theoretical direction (the non-agency research or the thesis option) or may involve observer participation in relevant community agencies and organizations.

SO 302 SOCIAL WELFARE AND SOCIAL CHANGE (3) The development of welfare and planning in association with the industrialization process. Agencies and occupations dealing especially with the elderly and youthful poor. Modern policies and proposals for change in selected problem areas. Prerequisite: SO 101.

SO 303 SOCIOLOGY OF LEISURE AND RECREATION (3) The study of the social institutional structure and functional systems of society related to leisure behavior. The social significance of leisure and the human values in leisure-time pursuits. Examination of practices and uses of leisure in the United States. Prerequisite: SO 101.

SO 304 SOCIAL CHANGE (3) Major theories of social change with respect to the origin of innovations and the reasons for their acceptance or rejection. An analysis of such sources of change as conflict, technology, and social planning in modern and developing societies. Prerequisites: SO 101.

SO 305 URBAN SOCIOLOGY (3) Growth, structure and functions of the city. The urban place as an ecological, stratified, attitudinal, and decision-making unit. Urban problems and urban social relations. Prerequisite: SO 101.

SO 307 SOCIAL PROBLEMS (3) A study of contemporary American society in light of selected problem areas. An analysis of contributing factors, conflicting views and values, current situation of prospects for resolution involving application of sociological concepts, theories, and methods. Prerequisite SO 101.

SO 308 SOCIAL STRATIFICATION (3) A systematic treatment of the ranking systems in various social structures in America. Theories of social stratification and mobility, analysis of social class studies in the United States, the interplay of power, status, and control. Prerequisite: SO 101.

SO 309 SOCIOLOGY OF RELIGION (3) The scientific study of religion dating from mid-19th century animists and naturalists. Religion as a basic social institution with both

integrative and diverse tendencies. Organizational patterns; interrelationships with other institutions. Theoretical developments within the field. Changing emphases in the function of religion as a major source of meaning and values in human societies. Prerequisite: SO 101.

SO 310 JUVENILE DELINQUENCY AND CRIMINOLOGY (3) Meaning, identification, and causes of delinquent and criminal behavior. The role of social institutions in corrections, control, and prevention of youthful and adult offenses. Prerequisite: SO 101.

SO 311 COMPLEX ORGANIZATIONS (3) Examination of major theories and studies of complex organizations. Emphasis is on recent findings regarding the influence of organizations on the behavior of members, bureaucratic ``pathology,'' succession and displacement of goals, organizational types, characteristics, and problems of bureaucracies in a variety of settings occupational, military, medical, religious, correctional, political; organization change in the light of contemporary theory and research noting the functioning of complex organizations in preindustrial and industrial societies. Prerequisite: SO 101.

SO 312 POPULATION STUDIES IN SOCIOLOGY (3) Introduction to population studies, provided within a sociological framework, and an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Prerequisite: SO 101.

SO 314 COLLECTIVE BEHAVIOR (3) Study of such phenomena as crowds and mobs, panics and riots, fads and fashions, rumor and propaganda, the formation of publics, and public opinions. Examines the transition from unorganized to organized group behavior, from behavior based largely on emotional contagion to behavior on a shared symbolic framework. Prerequisite: SO 101.

SO 315 CHANGING SEX ROLES IN AMERICA (3) A study of existing sex roles in contemporary American society; examination of the determinants of such sex roles; comparison with existing sex roles in other societies; investigation of the relationship between biological priorities and sex role expectations; analysis of how sexual ascription at birth influences life experiences and chances of men and women; analysis of the relationship between sex role and social stratification; and an analysis of the causes and consequences of change in culturally patterned sex roles. Prerequisite: SO 101.

SO 316 SMALL GROUPS (3) A systemtatic study of the influential theoretical and empirical writings and studies, classical and current, dealing with the structure and functioning of small groups; the influence of small groups research on theoretical perspectives in macro-sociology. Prerequisite: SO 101.

SO 318 SOCIOLOGY OF MEDICAL CARE (3) Examination of existing theory and research on medical care of a social institution. Study of the relation of social factors to illness, both physical and mental, and its distribution. Attitudes and beliefs regarding illness and the response to illness in various societies. Sociological analysis of hospitals as social organizations, of the medical profession, and of medical education. Comparison of medicine as it is practiced in the United States and in other countries. Prerequisite: SO 101.

SO 320 SOCIOLOGY OF EDUCATION (3) American schools as social organizations, as community associations, and as socialization agents. The functions of the school, and the relation of the institution of education to culture and social structure. Problems of change. Prerequisite SO 101.

SO 321 SOCIAL GERONTOLOGY (3) Aging as a biological, psychological, and sociological process with numerous economic and political implications. Emphasis will be placed on the role of both the family and the community. The crisis of retirement, illness, and dying will also be treated. Prerequisite: SO 101.

SO 322 INTERVENTIVE METHODS IN SOCIAL WORK (3) A study of the relationship of social change and social problems; the role of the individual, group, community in social change and in offering social services to individuals and groups; and the professional skills and techniques necessary to the offering of these social services. Prerequisite: SO 104 and SO 105.

SO 323 INDUSTRIAL SOCIOLOGY (3) A macro and micro-sociological examination of structure and functioning of industrial societies and their institutional and organizational components; major theoretical approaches assessing industrial systems. Production and distribution values, institutions; organizations, and roles of industrial societies along with norms affecting industrial social experience will be emphasized. Prerequisite: SO 101.

SO 324 HUMAN SERVICES: PLANNING AND ORGANIZATION (3) An analytical examination of the essential components and planning of human service: targets and agents. Assessment of innovations and their economic, social, and psychological costs and benefits. Prerequisites: SO 104 and SO 105.

SO 330 SOCIOLOGY OF LAW (3) The sociological study of law; analysis of the legal system; relationship between the legal order and other institutional realms of society; the effectiveness of law as a mechanism of social control, and the place of law in broader patterns of social change. Prerequisite: SO 101.

SO 351 SOCIAL WORK PRACTICUM (6) The course involves participant observation in social welfare agencies. Prerequisite: SO 322.

SO 399 INDEPENDENT STUDY (1-6)

WESTFIELD STATE COLLEGE BOARD OF TRUSTEES

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The date in parentheses following the name indicates the beginning of service at Westfield State College.

ADMINISTRATION

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GRADUATION CHECK LIST

Use this sheet to keep track of your academic progress

NAME _____

GENERAL CORE OF STUDIES (see specific list of courses on page 151)
(list each course completed and the semester)

1. Communications (6 hours)

_____ _____ _____ _____

2. Intellectual and Moral Criticism (6 hours)

_____ _____ _____ _____

3. Appreciation of Fine Arts (6 hours)

_____ _____ _____ _____

4. State and Local Government (3 hours)

_____ _____ _____ _____

5. Social Understanding (9 hours - 6 maximum in one area)

_____ _____ _____ _____
_____ _____ _____ _____

6. Natural Science* (must include one lab science)

_____ _____ _____ _____

7. Mathematical Reasoning* (must include one math course)

_____ _____ _____ _____

HOURS TOTAL 40

* Math & Science (10 hours including one (1) math and one (1) lab science)

MAJOR _____ (see specific list of courses for your major)

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HOURS TOTAL ____

ELECTIVES

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HOURS TOTAL ____

Note: Not all of these courses will be offered in every semester

GENERAL CORE OF STUDIES

HUMANITIES SECTION

1. Communications (6 hours)

English	EN 101 & 102	English Composition I & II

2. Intellectual and Moral Criticism (6 hours)

Philosophy	PH 101	Intro. to Soc. & Pol. Philosophy
	PH 102	Intro. to Ethics
	PH 104	Great Philosophical Issues
	PH 107	Major Religions of the West
	PH 108	Major Religions of the East
	PH 110	Intro. to Philosophy of Science
Literature	EN 213	Major British Writers
	EN 215	Major American Writers
	EN 221 - 222	World Literature I & II
	EN 228	Introduction to Shakespeare
Language	LF 101 - 102	French I & II (both needed for core crt)
	LF 103 - 104	French III & IV
	LF 120	Intensive French
	LF 200	French Conversation
	LG 101 - 102	German I & II (both needed for core crt)
	LG 103 - 104	German III & IV
	LG 120	Intensive German
	LG 200	German Conversation
	LI 101 - 102	Italian I & II (both needed for core crt)
	LI 200	Italian Conversation
	LL 100	Essentials of Latin
	LL 101	Intro. to Study of Language
	LP 101 - 102	Portuguese I & II (both needed for core crt)
	LS 101 - 102	Spanish I & II (both needed for core crt)
	LS 103 - 104	Spanish III & IV
	LS 120	Intensive Spanish
	LS 200	Spanish Conversation
	LE 101	French Culture
	LE 102	German Culture
	LE 103	Italian Culture
	LE 104	Hispanic Culture

3. Appreciation of Fine Arts (6 hours)

Art	FA 106 - 107	Art Survey I & II
	FA 104	Design Fundamentals
Music	MU 101 - 103	Music Appreciation
	MU 110 - 111	Basic Music Theory
	MU 160	History of Jazz
	MU 107	Music in America
Drama	EN 104	Introduction to Theatre

SOCIAL SCIENCE SECTION

1. State and Local Government (3 hours)

	HI 130	U.S. History and Government
	PL 101	American National Government

2. Social Understanding (9 hours - 6 maximum in one area)

Economics	EC 101	Principles of Macroeconomics
	EC 102	Principles of Microeconomics
Geography	GP 101	Principles of Geography
History	HI 101 - 102	Western Experience I & II
	HI 150	History of Non-Western World
Political Science	PL 101	American National Government
	PL 103	State and Local Government
Psychology	PY 101	General Psychology
Sociology	SO 101	Principles of Sociology

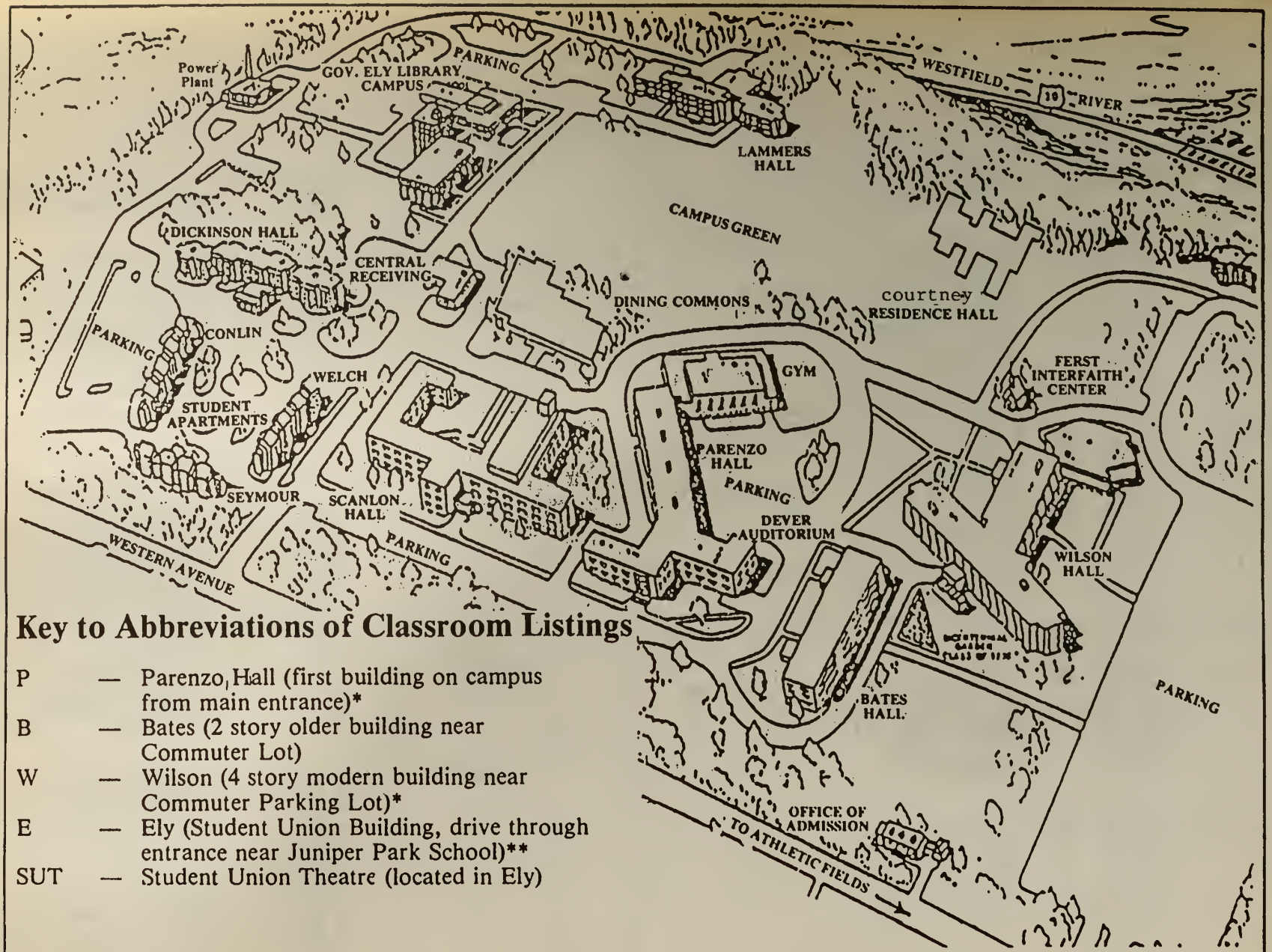
ANALYTICAL SCIENCE SECTION (10 hours including 1 math and 1 lab science)

1. Natural Science

Physical Science	PS 101	Physical Science
	PS 104 - 105	Physical Geology & Lab.
	PS 106	Historical Geology
	PS 107	Intro. to Chemistry
	PS 109 - 111	General Chemistry I & II
	PS 113	Introduction to Physics
	PS 115 - 117	General Physics I & II
	PS 119 - 121	Physics I & II
	PS 133	Astronomy
Geography	GP 102 - 103	Physical Geography & Lab.
Biology	BI 102	Environmental Biology
	BI 104	Biology of Organisms
	BI 106	Inheritance & Development

2. Mathematical Reasoning

Mathematics	MA 104	Precalculus
	MA 105 - 106	Calculus I & II
	MA 108	Elementary Statistics
	MA 110	Mathematical Explorations
	MA 111	Mathematical Applications
	MA 115	Math. for Bus. & Soc. Sci.
	MA 127	Calculus for Bus. & Soc. Sci.
	MA 150	Foundations Sets & Logic
	MA 251	Foundations/Geometry
	MA 252	Foundations/Prob. & Stats
	MA 253	Foundations/Number Systems
	PH 103 - 206	Symbolic Logic I & II



Key to Abbreviations of Classroom Listings

P — Parenzo Hall (first building on campus from main entrance)*

B — Bates (2 story older building near Commuter Lot)

W — Wilson (4 story modern building near Commuter Parking Lot)*

E — Ely (Student Union Building, drive through entrance near Juniper Park School)**

SUT — Student Union Theatre (located in Ely)

**Handicap accessible*

***Location of Library and Bookstore*

Westfield State College

Westfield, Mass. 01086